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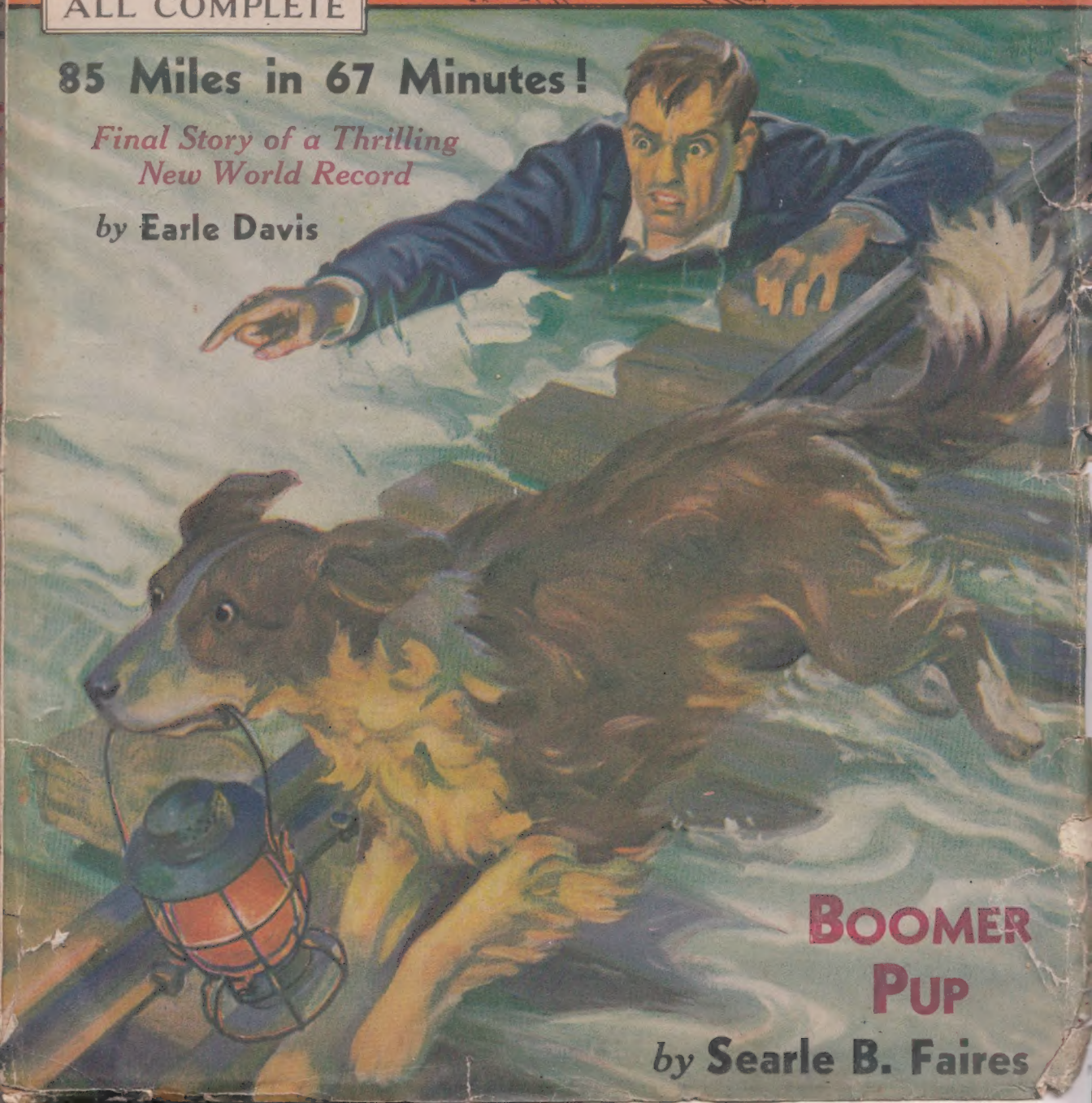

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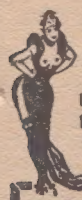

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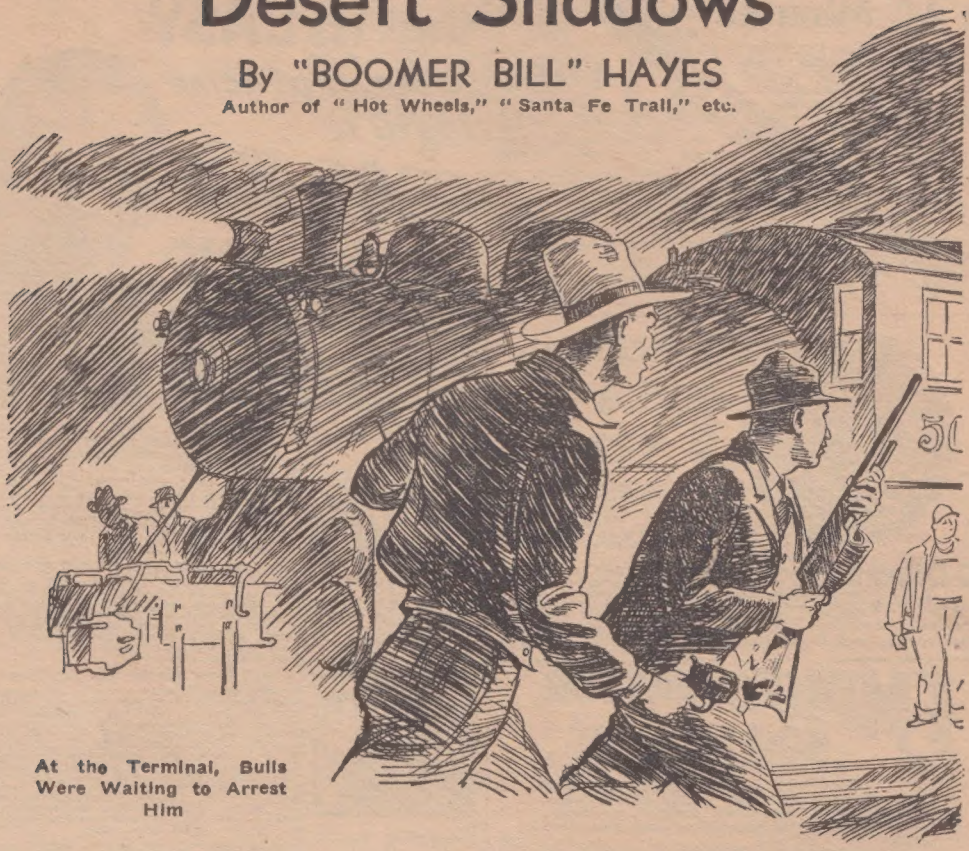
Desert Shadows

By "BOOMER BILL" HAYES

Author of "Hot Wheels," "Santa Fe Trail," etc.



At the Terminal, Bulls Were Waiting to Arrest Him

Just as Bender Was Ready to Put Down Roots, Give Up Booming, He Stumbled into a Tough Problem

THEY were huddled in the forward end of the steel gondola car, George Bender and the kid. Although the darkness of the desert night was intense, grimly cold and starless, Bender could tell the kid was crying.

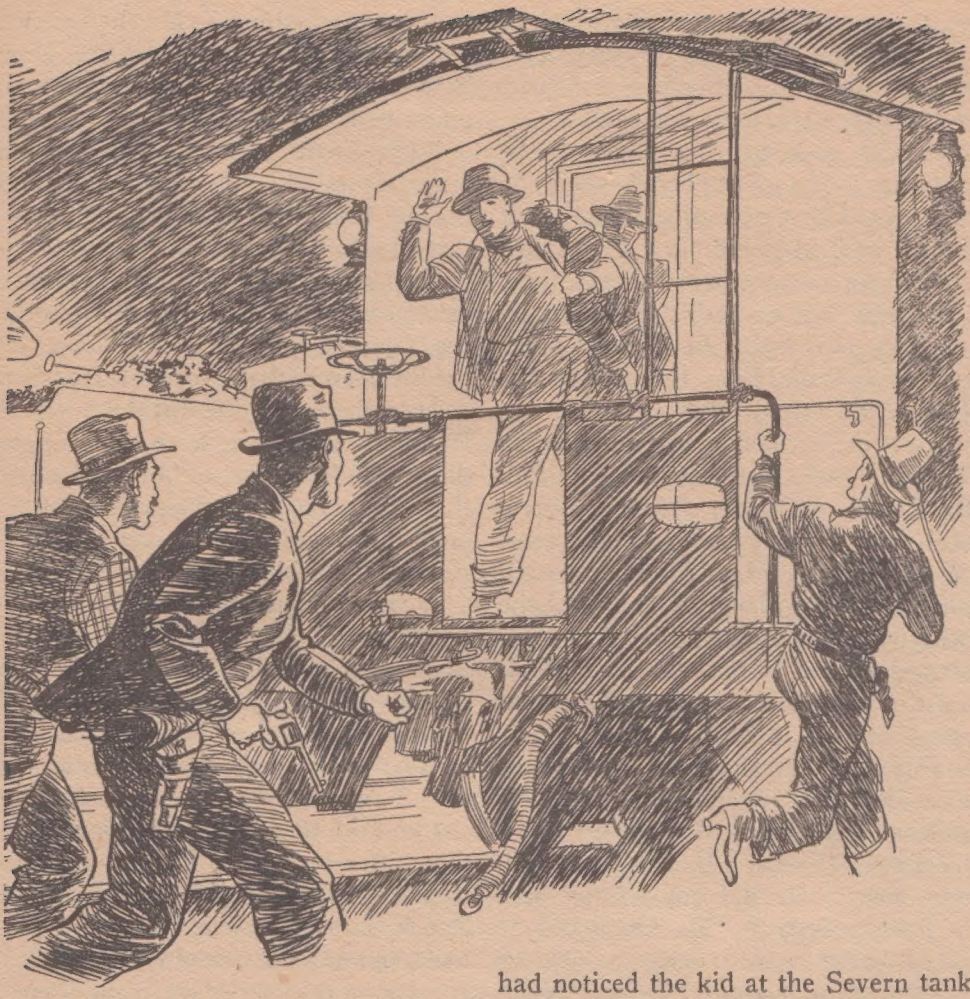
Their bodies were pressed together for warmth against a penetrating wind created by the westward rush of the red-ball freight—hot-shot merchandise in every loaded car. Bender felt a strange tremor in the kid's emaciated length and knew instinctively it was not a desert chill, but the feeble sobs that came on top of a feebler effort to hold them in check.

His big right hand clutched the kid's arm. He put his lips down to the ear beneath the cottonish shock of hair.

"Easy, kid," he said.

Bender didn't know the youth's name. He hadn't asked it. He had spotted the lad that afternoon near the water tank at Severn where they both had boarded the train. He patted the boy's arm.

"Maybe," the man continued after a pause, "if you'd tell me about it, you'd feel better."



The youth shook his head. It wasn't easy to talk. The freight train was hitting it up, the churning wheels swirling the desert dust from the ballast. A long, black, many-jointed worm on the barren breast of the earth, clanking out its symphony of power and speed against the vast reaches of relentless waste.

The kid had big brown eyes, bright in their sunken sockets, stamped with pain. Those eyes had drawn Bender perhaps more than anything else, because he saw the suffering there. He, too, knew what suffering meant. He had noticed the kid at the Severn tank trying to keep to himself while a motley group of nomads lounged just beyond the right-of-way fence waiting for transportation east and west.

Bender had spotted the kid because, at first glance, he obviously didn't belong. Didn't know his way about. He had seemed ready to cry then, and Bender had rubbed elbows with him unobtrusively because Bender realized what it was to find yourself on the road without home, without friends and, worst of all, with no experience on the road.

Their conversation had been limited. Bender had suggested that since the

youth was rolling west, they might grab the first thing out together. Shy at first, the boy gradually placed trust in his wide-shouldered companion.

Bender reckoned the fellow to be eighteen. He remembered when he had passed that milestone. Ten years ago. It seemed incredible that so much could have happened in so short a time.

George Bender had started out by learning telegraphy in his old home town in Manitoba. Swept out the depot and fired the waiting-room stoves, in exchange for instruction. Then he had taken his first job with the Canadian Pacific. The big system sent him a long way from home. Shortly afterward, his mother passed on, and he was alone. The lure of the road was strong upon him. There was always a bend in the tracks. And always an insatiable desire to see what was around that bend.

One road, and then another, and the Canadian drifted into that class of railroad employee known as a "boomer," a man who can't stay still very long. He did not always stick to brass-pounding. He found out he could make much more money as brakeman or fireman, because hours were limited only at sixteen, and a sixteen-hour day was not uncommon on the main lines.

At the moment Bender was a free agent. He was heading for the terminal point of San Jacinto because the California fruit rush would soon begin, and the desert main would be hiring brakemen and firemen to handle it. In a day or so there would be a job at San Jacinto, so the boomer intended to be there among the first.

This time he hoped he could stay. He admitted that the long succession of jobs was beginning to wear on him, and he wanted to put down roots. He had seen everything in North America and had been almost everywhere. Now he was almost thirty. At thirty a man ought to be somewhere.

Funny that such thoughts should enter his mind. Maybe the kid, and his big, wondering eyes, had had something to do with it.

Ordinarily Bender would not have met up with the kid. Usually he rode the caboose, for the reason that his cards in both the Order of Railroad Telegraphers and the Brotherhood of Railroad Trainmen were paid up to date. He had gone to the yard office that afternoon to see the skipper on the next thing west, only to have certain rumors disturbingly confirmed.

It was "impossible" for the brothers to carry boomers on this district of the desert main line, because of strict official rule against such practice and because the high iron was infested with railroad bulls who would report a conductor on the slightest provocation.

Chief of these desert shadows was that bitter menace to hoboes, the man they called Frane, the Sapper. The Sapper's usual practice was to shoot and slug, and ask questions afterward. No jungle fire gathering in the nomad world was complete without at least one living victim of this detective's fierce assault. They said he always rode alone, and his hatred of free riders was an all-absorbing passion. They said no con or shack knew when or where he would board a train.

Bender had been tipped off that very afternoon by the skipper, who was friendly, but not at all optimistic about Bender's chances.

"We never know," the conductor had warned. "An' I wouldn't advise you to ride that hot-shot job with us. If I was you I'd wait until tomorrow mornin' when a drag of dead freight

moves. Not likely to encounter the Sapper there. But if you do ride our train, an' if you do see him, try to show your Brotherhood cards before he clubs the hell out o' you. Not that the cards are likely to do any good . . ."

BENDER wasn't afraid of the Sapper. He knew how tales of cruelty on the part of railroad bulls could be magnified. Hadn't he worked with bulls in every corner of the land? Had he ever run into any really mean one? He tried to recall just one. He couldn't.

Of course, there had been some roughnecks, but they were tough only with suspicious characters loitering around yards and terminals.

The conductor had said something to Bender about freight being robbed.

"That's why the Sapper's worse'n usual," he cautioned. "We been havin' some strange robberies on this here division. Usually valuable stuff. Another reason for stayin' off of merchandise trains."

Well, here he was on a merchandise train, riding like the desert wind itself. He was on it because he wanted to reach San Jacinto that night, get some rest and be ready to present himself to the trainmaster first thing in the morning.

He knew it would be a case of "first come, first served." And with the number of worthy brothers looking for an office, it wouldn't do to take a long chance. The Canadian wasn't fully acquainted with the territory, but he'd been trying to keep up with the stations he'd passed, and with the timetable he carried. As he reckoned it, they were now fifty or sixty miles from San Jacinto. If they kept up this rate they'd be there within the next two hours.

A sudden beam of light playing over him interrupted the boomer's thoughts. The glare stabbed out from the corner of a covered hulk in the middle of the car. This car was laden with some sort of machinery under canvas.

Bender stiffened but did not look into the light. The kid did. He saw the big eyes blink. The boomer kept his own head down out of it. Nobody but a bull flashed a spot on you like that. Bender kept his hat brim low and touched the startled kid's arm with assurance.

The light came closer.

"Stand up, you two!" The voice was grating.

Bender still kept his head down, his hands in sight. A strange foreboding seized him. Something in that voice almost branded its possessor as the dread Sapper.

Bender got to his feet, then assisted the youth to his. The latter continued to stare blindly into that glare. Looking out from beneath his hat brim, the Canadian saw a gun come in front of the illumination.

"Put 'em up," the voice snarled, and the gun poked forward menacingly.

Bender's hands went above his head. He saw the white-faced boy's hands also go up.

"What the hell you ridin' on?" the voice demanded.

The light was placed on the car floor at their feet. With his free hand, the man with the gun jerked Bender's hat brim up.

Bender kept his face in the shadow, but he could see the other's greenish eyes. He looked, he knew, at a killer. Never had he seen eyes in a human with such a deadly, snaky glitter. They sparkled like polished beads in a wide, dished-out face where the mouth was simply a bitter slit.

Bender's hands, above his head, went into fists. The gun was close to his middle. The man's free hand started to pass over him swiftly, feeling for weapons.

Bender shuddered. There was something evil in the touch of those paws.

"If you'll listen just a second, chief," the boomer began, "I'll show you I—"

Slap! A stubby hand smote his mouth.

QUICK fury burned in George Bender's heart. He fought against an inclination to rush headlong into this squat hulk. There was the menace of the gun. Perhaps if he waited, nothing worse would come to them than being dumped off the car and left on the desert to wander until they came to a place of refuge.

The Sapper only wanted an excuse to shoot or slug. From what Bender had heard of him, this slap in the mouth was but mild punishment. Perhaps if he frisked Bender thoroughly enough, he would come across a wallet in the coat he wore beneath his protecting suit of overalls.

That wallet contained Brotherhood cards and a couple of excellent service letters. If the Sapper read these, and still insisted on being tough, then Bender would give up all hope.

He held himself under control. The Sapper's frisking was complete, but he did not go into the pockets for personal effects.

Bender kept watching the boy. You could see he was scared to death. His face was white, his eyes wide in uncomprehending horror. He seemed on the verge of collapse.

The car swung to the right sharply as the wheels bit into a curve. The youth swayed and went down on one knee, catching himself with both hands. The Sapper kicked him viciously.

"Get up! Stick up those mitts!"

The kid got to his feet unsteadily. While the Sapper's hands were running over the sparse frame in the faded overalls, Bender debated on attempting again to identify himself. He saw the gun, held in the Sapper's left hand so it could swing sharply on either or both of them. He couldn't tell, but he was certain the safety was off. This killer would take no chances.

Bender was about to speak when the car lurched under him. Again the kid was caught off balance. But this time he didn't fall over as he had previously done.

It happened almost too fast for the eyes to follow. But Bender followed every movement. The boy started falling forward and tried to right himself. Probably he remembered the kick he'd received the other time. At that moment the bull was frisking his hip pockets. The bull was in a slightly stooped position, gun ready, as always.

The kid staggered, slumped forward. He was going down on Frane's shoulders. His upraised arms stabbed out to keep himself from falling. They caught the bull at the neck. They didn't wrap around the thick neck. They fell over the shoulders.

Frane gave one quick backward jerk. There was a spurt of flame, a vicious, deadly crack, an agonizing shriek. They all came so close together that they seemed blended into one sound.

Bender had a hasty flash of the kid spinning, clutching his left side. He had a quick glimpse of the kid going down.

Then he waded in. He saw the men-

acing gun swung on him, saw the second spurt of flame. But the bullet went harmlessly above him. He had the Sapper's gun hand, his strong fingers holding it in a vise-like grip. He used his right fist for a smashing blow to the face. The Sapper's big arm closed about him.

Bender staggered under the bearish hug. He felt the hot pulses drumming in his head. He saw, as he whirled, still holding the gun hand, the kid lying in a pool of blood on the dark floor of the bouncing car.

Stepping on the flashlight, Bender crashed its lens with his heel. The car suddenly was in darkness. Twisting into an advantageous spot, he got the gun arm bent back. He was calmly aware that this was a last ditch fight. Frane would finish him savagely, happily, if he so much as gave the gorilla-like bull an even break.

HE heard the Sapper grunt, heard the gun fall. Something smashed at him, grazing his ear. Bender released his enemy's gun hand and concentrated on a swift swing. He had not shoveled coal into the hungry maws of road engines from Ontario to Texas without getting a little muscular development.

The Canadian's jab had the power of a Mountain type engine's piston drive. He caught the bull on the chin. The bull staggered, arms falling to his sides. Bender followed with another. Frane sank to his knees. The boomer cut loose a third and the killer fell over on his face. Bender slammed a heel against the man's temple just for extra measure.

Panting, he leaned against the steel side of the car to get his breath. The jumper of his overalls was half torn off. One sleeve was hanging by a thread. His face was bleeding where the bull's knuckles had slid along his jaw.

But Bender wasn't thinking of himself. He felt over the senseless hulk of the Sapper and found another flashlight. This he turned to his young companion.

The kid was bleeding profusely. Bender tore his coat and shirt away. He felt over the heart. It was beating. Then he dabbed at the blood, and flashed a light on the wound.

Bender worked hurriedly. He remembered they had said the Sapper always rode alone. But he didn't want to take chances. The Sapper wouldn't bother him for some time. Somebody else might. And he knew the spot he'd be in if another special agent came over now. No matter how justified this attack on the Sapper, it would mean the penitentiary for Bender.

He stripped his coat off, tore out half of his shirt. His shirt was clean. He tied a knot with a sleeve. Then he made a long bandage with the rest. He put the knot in the wound.

While he worked at stopping the flow of blood he thought about throwing the Sapper over the side. But that wouldn't help much. Besides, he couldn't kill a man that way. No matter how mean. He could have killed the Sapper a moment ago, when he had thought the kid to be dead, but not now. No, he'd handle it differently. He knew the spot he was in.

As Bender saw it, the first move was to get the boy off that train. Get him to a doctor. Undernourished as he was, his resistance undoubtedly at low ebb, anything might develop.

The boomer wasn't familiar with this country, but he couldn't dally. There was danger of somebody else coming over that train with a dreaded

spotlight. Hurriedly he tied the bandage. He inspected the wound. The flow of blood, for the moment at least, was stopped.

Quickly he gathered his things together. He put his coat back on over his torn shirt. He pulled his mutilated jumper over his coat. The train was going slower now. He listened to the song of wheels clicking over the rail joints, and heard the exhaust of the locomotive. These sounds told him they were climbing a stiff grade. The train was making less than ten miles an hour. They could get off here.

Bender put the light on the Sapper. Unless all signs failed, Frane would be out for a long time. When he came to, he would spread the alarm. Meanwhile a life was at stake.

With no idea how far it might be to an outpost of civilization on this desert, Bender took his tightly wrapped bundle containing his change of shirts and underwear, his few personal effects, and threw it over the side of the car.

Then he hoisted the boy, balanced him on the edge of the gon, and climbed over to the side ladder, steadying the inert form while he got his feet solidly planted on a rung.

This accomplished, he worked the burden around until he had the kid slung over his shoulder like a sack of sawdust. Then he backed down the ladder cautiously until one foot was in the stirrup and the other suspended in the air.

NEAR the rear of the train, toward the caboose, he saw a lantern on top. He couldn't be sure if it were moving. A brakeman, perhaps, going over to see that everything was all right. Bender didn't want even a brakeman to see him now.

For a long moment he poised. It was a dark night and he couldn't see the ballast distinctly. He could only glimpse a gray-black blur. He hoped he could keep his footing. The boy didn't weigh much, and unloading from a rattler at ten miles an hour was no stunt for an old head like him.

Bender unloaded. He lit running, with knees relaxed. He staggered heavily, but kept his feet until he came down to a halt. Then he slid down to the shallow ditch and put his companion in the sand.

The boomer lay down beside the lad. It wasn't much of a ditch in which to hide from prying eyes, but he hoped nobody in the caboose would spot them.

He held his breath as he listened to the clatter and roll of the wheels, the clank of a flat one as it passed. Presently the clatter changed. The caboose was rolling by, the dim yellow patch of its side window glowing. A lantern was on the roof, waving. Far ahead, the engine whistled for a crossing.

Bender didn't stir at once. No use taking undue chances. The rest felt good. He would need a lot of strength to walk along these ties to the next town. Even then he was going to be in danger. The doctor would get curious.

He caught his breath as an aura of light shone about him. Then a voice said:

"It seems you boys could pick a better place to sleep than right in front of my telegraph cabin."

The Canadian sat up sharply. He tried to peer beyond the lantern's glow. A woman was speaking. A low, rich note. He started to his knees when something gleamed in the lantern's aura. The owner of the voice held a small revolver in readiness.

"Now, mister, if you've got something to say . . ."

The voice broke off with a sharp gasp. Bender had a quick view of pretty ankles, the soft sheen of silk on swiftly moving legs.

"Why—why—that boy's hurt!" the girl cried.

Bender saw blood oozing freshly from the wound. The bandage had slipped in the descent from the car.

"If you don't mind giving me a little water, ma'am, and your first aid kit—"

The girl was on her knees by the kid. Bender saw her face now. It was wistful, with large violet eyes and a straight nose, and a mouth chiseled boldly. A mouth that could be soft, too, and tender.

Bender got all this as she leaned over. The caboose was far up the track, its red tail lights blinking.

"Who—who did this thing?" the girl demanded, still clutching her revolver. She looked at Bender squarely.

"Let me get him fixed up first, ma'am," the boomer pleaded.

But she was looking at the wounded boy, her hand on his heart.

"The Sapper," she said, under her breath. Bender felt a note of hate and loathing in her voice. Then she turned to him suddenly. "Come on. I'll give you a hand."

The Alarm

THERE was no time for introductions, no time for explanations. Despite Bender's quick work, the patient had lost much blood. They got him in the telegraph shack and laid him on a cot. Bender ripped off the crude tourniquet. The girl got water, soap, and her first aid kit from a cabinet over the telegraph table.

They began efficiently, quietly. The girl washed out the wound, felt over it with expert fingers. She said nothing. She applied iodine, made a knot of bandage, fitted it into the wound. Adhesive tape and more gauze enabled Bender to put on the finishing touches.

There was a bottle of spirits of ammonia in the kit. The girl used it under the youth's nostrils. Presently his cottonish head stirred, tossed feebly.

"A tin of water," the girl said.

Bender poured a tin of water. The girl had her arm back of the patient's neck. She dropped some ammonia into the water, held it to his lips. He sipped slowly. Then she let his head down and bathed his face.

"He ought to have something to cover his thin little body," the girl said. "If I could get hold of a shirt . . ."

Bender remembered his bundle, thrown from the train. He went back along the track searching for it. It couldn't be very far; the train had been moving slowly. He found it in a ditch, and on his return to the cabin he realized how the train had hidden the lights of the windows from him. He had unloaded with the kid on the right-hand side, and the cabin was on the left.

He saw the name on the cabin as he approached. It was Chaparral. The boomer smiled grimly as he looked about. That name was perfect. There was a mesquite thicket at the rear of the structure. Which was plenty good as a definition for the word.

West of the cabin, also on the left of the track, was a switch light. A long siding stretched alongside the

main. There was no evidence of a town, even in the distance.

The girl slipped one of Bender's clean shirts on the patient. Bender marveled at her capable fingers, long and tapering. There was something definitely capable about her whole being. The way she walked. The way she went right into things.

"What's your name?" Her question was directed at the Canadian. Frank and quick.

"George Bender," was the reply.

"The boy?"

"I don't know." Bender hadn't asked the kid what he was called. "All I know he's half starved. I picked him up in the jungle at Severn. I didn't know he was hungry then. I'd have held up and fed him."

"Put a fire in the stove."

The girl produced bouillon cubes, whole wheat crackers, a tin of milk. When Bender had the fire going, she made broth. She said no more until the boy had been fed. She fed him lightly, taking into account his general condition.

After he had the milk she asked his name. He said it was Rogers. Tommy Rogers.

The kid didn't try to talk much. He spoke in broken sentences.

"I've been traveling a week," he mumbled. "Mama died in Sioux City. She—didn't leave—anything. The—county buried her." His voice broke on that. "They were going to send me to—to Uncle Abner. He was—mean. I wouldn't go. I ran off. I knew I could get some work somewhere. I kept on trying. Then—what little money I had—run out. I—didn't eat. This man—"

Bender patted the kid's arm. "O. K., Tommy. Quiet. Feel any pain?"

"A throb," Tommy said.

"How'd he get that bullet?" the girl asked.

Bender explained. He told the story without drama. He made no undue mention of his own part in avenging the lad and getting him off.

"Are you a rail?" The girl wanted to know his occupation.

"A brass-pounder, among other things." The Canadian identified himself as a telegrapher. "But you? Who are you, and what are you doing way out here in the middle of night?"

"My name is Speed," the answer came. "Laura Speed. I have five years' rights on this pike. I bid in this job two weeks ago. I'm staying with my brother on a ranch back up the trail three miles from here. I came out here because—" Her voice failed. A mist of tears played across her eyes.

BENDER sensed something wrong. He saw the girl bite her lower lip to keep it from quivering. Then she said: "You going to look for a job, Mr. Bender?"

"Tomorrow," said the boomer. "In fact, as soon as I get Tommy fixed up, I'll ramble on to San Jacinto. Of course, after my little affair with the Sapper, maybe it'll be tough for me to—"

"If you go to work here you'll hear about—my father," Miss Speed remarked hesitantly. "Jack Speed. You'd—I'd rather you'd hear it from me. Father never did what they said he did." Her voice took on a fierce, defiant note. "My father never stole."

"Please, Miss Speed," Bender said. "You don't need to tell me—"

"You'll hear of Jack Speed," the girl rushed on. "They all talk about him. I don't know what they'll tell you. But you'll hear that Jack Speed went to state prison two weeks ago be-

cause the Sapper caught him red-handed in a box car robbery."

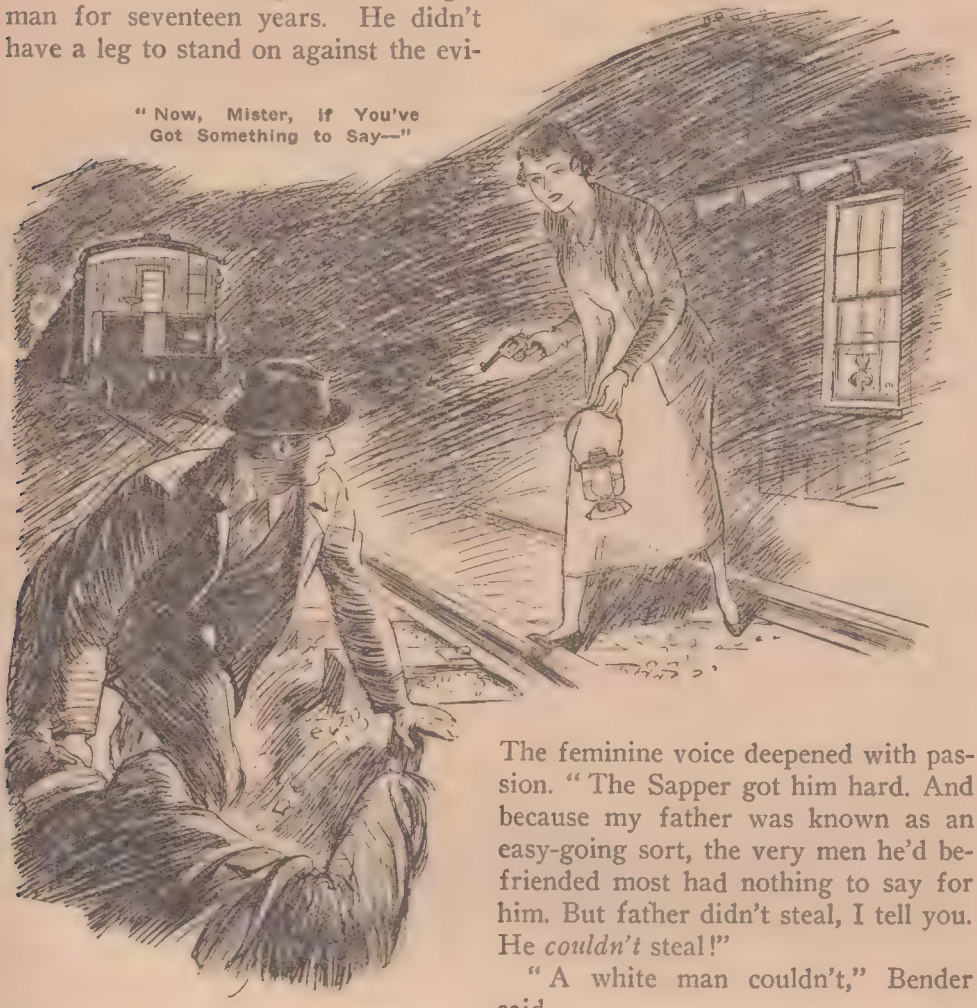
"Tell me about it," said Bender.

"Father was a main line conductor," the daughter replied. "Freight man for seventeen years. He didn't have a leg to stand on against the evidence the Sapper brought in. He'd had a record of being a little loose. He was the kind of man who took long chances. He carried wandering brothers. He fed tramps in his caboose. He crossed the Sapper once in the matter of protecting a tramp, just as you handled the Sapper tonight to save a boy's life. You believe me, don't you?"

Her wide eyes were upon him and Bender wondered at their magic depths.

"Of course I do," he said warmly.

"The Sapper was out to get him."



"Now, Mister, If You've Got Something to Say—"

The feminine voice deepened with passion. "The Sapper got him hard. And because my father was known as an easy-going sort, the very men he'd befriended most had nothing to say for him. But father didn't steal, I tell you. He *couldn't* steal!"

"A white man couldn't," Bender said.

"Five years," the girl went on bitterly. "Five years in prison. When he gets out—well, you know how that would hit a railroad."

Bender knew. He shook his head.

"The Sapper framed him," Miss Speed insisted with vehemence. "But who can prove it? The officials—they think the Sapper is a god of vengeance on this pike. He can't do wrong. He

framed my father to settle an old grudge. That's why I took this desert night job. I thought I might sort of forget. Certainly I don't want to be around the old scenes any more. The place were I grew up in San Jacinto. The old friends."

Bender regarded the violet-eyed brass-pounder as she strode to the window. He watched her stand at the telegraph table, her back to him. For a moment the desert silence pervaded. There was only the low, metallic murmur of the brass instruments.

There was something bravely defiant about that back, slim as it was. There was something of the courage of pioneer women in the way she stood, feet wide apart, hands behind her back, shoulders straight. A woman courageous. A long-legged girl with deep eyes, fighting alone in the dark.

The boomer went to her side. He wanted to take her hands and assure her that in him she had a friend. His freckled smile broke slowly, and he blurted out:

"Maybe, if I get a job in San Jacinto, and keep my eye on the Sapper long enough—"

HE broke off sharply. No one in that room had spoken, and yet a voice was rattling out, a brass voice with an ominous message. The girl heard it, too. Her hand was clutching his, and she was crouched against the wall, her big eyes glued on the brass sounder that was speaking.

The sounder was giving the signal for all points to copy a hot message, a message with preference over all wire traffic. Then came the words:

Address all sheriffs

Immediately there were responses from a dozen points.

"Commercial wire?" Bender asked tensely.

"Yes," the girl said. "I keep it cut in. Listen!"

The brass rattled its message:

All sheriffs. Be on lookout two desperate characters who left Train No. 609 somewhere between Amargosa Canyon and Ledbetter after assault with intent to kill on person of Special Officer Frane of railroad police. Officer Frane says he shot one man before other slugged him. One man wounded. One man believed to be George Bender, former railroad man, although not known to this system. Watch all roads . . .

"George Bender!" the girl whirled on the big boomer. "Then they know—"

"Great God!" The Canadian was clawing into his inside coat pocket. "My wallet. I had my coat off in that car when I was dressing the kid's wound with part of my shirt. I—my wallet's gone. I must've dropped it there. My Brotherhood cards and my service letters. Oh, good God!"

He kept clawing into his pocket which was empty of all papers. He stared blankly into space.

"Hunted!" The word strangled in his tight throat. He swallowed. He realized the girl held to him with tightly clenched hands.

"And I've never had a spot on my railroad record in my whole life!" he added.

The boomer was talking to himself more than to her. He was thinking of Tommy Rogers. He visualized the relentless hunt that even now was being started for himself. For a moment the temptation was strong to curse himself for a fool because he had tried to ease a fellow traveler over a tough trail.

He heard the girl speaking.

"I can help at least a little," Laura Speed said. "My brother Pete could take care of Tommy here until he gets well and strong again. If you can get him over to the ranch. And then—well, you don't have to go to San Jacinto for a job. You can rest up with us for a week or so. Maybe with a shave, and your overalls off, the Sapper never would be able to identify you. Maybe—"

Bender's smile broke. It took more than quick trouble to down it.

"That's it!" he shouted. "A shave. These overalls off. Another name for a while. Listen, lady, if you'll show me the trail . . ."

"I close this place at twelve. Just a few minutes to wait." The girl fixed him with her limpid violet eyes. "We'll go over together."

Under a Flag

GEORGE BENDER reached his decision. It was nine o'clock, a brilliant desert morning in the green oasis city of San Jacinto. Shaved, his suit pressed, a starched collar on, the boomer had ridden in early from the Speed ranch with Laura's roughneck brother. He had ridden to town in a brown study, trying to think up some name, not too phony, under which to seek a post.

He couldn't be grateful enough to Laura and Pete. They had been swell. Pete had grouched a bit because Bender had not killed the Sapper. He had said:

"Me? Man, I'd 'a' taken that rat's gun an' made enough holes through him to give worms a good start."

Pete had been more than willing to keep the patient under cover until something else could be done about it. He had decided a doctor wouldn't be necessary, and the kid could rest up and feed as long as he wanted to.

Bender's appearance certainly had altered since the night before. And now he knew exactly what he was going to do. He was out to find work. A special kind of work. It was taking a long chance, maybe, but you couldn't accomplish things without taking chances.

Looking at the newspaper he had just put down, the boomer took it up again. A two-column headline had caught his eyes:

TRAIN BANDITS FLEE AFTER BRUTAL ATTACK

One Is Wounded in Gun Fight Aboard Speeding Freight; Ex-Railroader Sought

Then followed the lurid story. Evidently the Sapper had told the reporters plenty. Bender's freckled smile was wide. But his eyes hid a cold light. He read:

Cruelly beaten to within an inch of his life, Special Officer Charles Frane of this city is alive today, and every highway is being watched in an effort to apprehend two men believed to be part of the ring of box-car bandits which have long menaced this district.

Coming suddenly on the desperados who were crouched in an open gondola car on train No. 609 last night, Officer Frane drew his gun and attempted to search the pair for weapons. Both resisted. While he shot one in the line of duty, the other slugged him with a heavy blunt instrument.

The brutal attack took place some distance west of Amargosa Canyon. Mr. Frane is not sure of the exact spot.

The identity of one of the assailants is virtually certain. Mr. Frane, in his struggle with the men, tore off the coat

of one and got the man's wallet which he held onto as the knockout blow was delivered. Cards and papers identify the man as George Bender, erstwhile railroad brakeman and telegrapher.

This discovery ties in with Mr. Frane's belief that the systematic car robberies on this district are being supervised by someone who knows the railroad from A to Z. Mr. Frane is appealing to all county officers to help in running down this pair.

The wounded man is described as about twenty-five, tall and thin, and dressed in overalls. The other man, believed to be Bender, Mr. Frane said is also tall, but heavier and wore a beard and dark clothes.

The fight evidently forestalled any robbery of train 609, although the car immediately in front of the gondola in which the attack on Mr. Frane took place was loaded with valuable merchandise such as is often stolen by the mysterious ring of which Jack Speed, lately convicted freight conductor, was the first member captured.

Mr. Frane is confined to his home, 87 Lobo Street, as a result of the attack. His injuries are believed not to be serious.

Bender tossed away the paper. The kid, described at twenty-five. Just like a bull. You could depend on them to get things wrong. Brutal attack, eh? The fingers of Bender's right hand tensed. Frane was lying to save his face. The Sapper knew he was in a spot, too.

The boomer thought it all out. He had to work here for several reasons, the least of which might be to get his wallet and his record restored to him. In order to get by, he had to use a false name, work "under a flag." He had to borrow somebody else's record, so to speak, until he could reinstate his own. Whose record?

He must give the name of somebody no longer connected with the railroad service, so that when this pike wrote for references he would be covered. The only name he could think of was Jeremiah Townley.

Townley was about his size, and wasn't on the road any more. He had left to take up a farm in Idaho his father had left to him. He had severed all connections with the iron road back in the Middle West. Yes, Bender could use his name and get away with it. He could even write Townley and explain what he was doing. Townley was a good guy.

Everything was all right, except for the fact that Townley was neither brakeman, fireman nor brass-pounder. Townley had been a bull! Which meant that Bender would have to become a bull also.

HE went to the station. His chin out, his shoulders back. With heart pounding, he ascended the stairs to the division office. The boomer looked at names on doors. Presently, before the name of "A. J. Shannon, Chief Special Agent," he pulled his nerves together, grasped the knob and plunged in.

Bender's face was set into a hard mask when the clerk showed him in. He saw Shannon, eyes sunken from obvious worry, glance up at him and wave to a stiff, hard chair.

"What is it?" Shannon snapped wearily.

"You've had trouble here," the Canadian said pleasantly. "My name's Townley." He got it out fast, assertive. "I've a hunch, knowing railroads as I do, that you'd give your eyeteeth for a good man right now."

"Townley?" Shannon's eyes were searching him. "Who are you, and where you from?"

Bender shot his line. Always he spoke in terse, crisp sentences. He acted Townley's part. He told about the gang Townley had cleaned up in East Chicago. It had been reported

largely in the papers. It had been a spectacular thing.

Shannon gave a smile of relief. "Listen. What the hell you doing out here?"

The boomer was ready for that one, too. But his heart was hammering at his ribs as he went on. He made the story sound logical. Tired of the farm. On his way down from Winnipeg to the southern California country when he had a hunch. A man misses the steel. That's how Bender socked it to him.

"If you want to telegraph the chief in East Chicago," Bender said carelessly, "and you really can use a man, I'd like to stick around. A little while anyway. The chief at East Chicago will give all the references you want. Of course . . ."

Shannon pressed a button. "Listen, Townley. I'm desperate. I got a couple good men, but that's not enough. One of 'em's a little handicapped now. You read that. The general offices are down on me. They've instructed me to put an end to this terror once an' for all, and hire an army if I have to. Listen, Townley! We sent a freight conductor over the road, but he wouldn't talk when Frane trapped him. He wouldn't squeal.

"Frane turned every stone, but Frane alone ain't enough. This is a job one man can't do all by himself, see? Jack Speed knew all right! Listen, Townley! Jack Speed wouldn't tell a word. He just denied everything. But Frane had him red-handed. Frane had twenty dozen French imported silk stockings outta the locker on Speed's caboose, and had a witness to prove he saw Speed enter the car the stockings came out of."

Shannon fished into his pouch for a chew. He stuffed his jaw full. Bender watched with his heart in his mouth, and said:

"Maybe it'd better for all of us if you don't make any publicity about me joining up. Eh? Maybe I could work better. I got a rep. Maybe if only you an' whoever I work with knows about me—"

"Damn good idea, Townley. Now listen! I'm taking you at face value. I know about you, heard plenty about you. You got your ticket bought through to Los Angeles."

THE Canadian took that one between the eyes. "No, I didn't," he said lamely.

He couldn't say anything else. He was in a tough situation. Then the answer came glibly:

"As a matter of fact, I came with the specific intention of seeing you. Had a letter from back Chicago way short time ago in answer to one I wrote as to where there might be a railroad job. My old friend said: 'If you ever get around San Jacinto, go in and see a guy named Shannon.'"

Bender knew he was sweating.

"When you ready to start doing things?" Shannon demanded.

"Now."

Shannon reached for the buzzer again. Before his hand touched it the door opened.

Bender's breath caught in his throat. In the door stood a giant, squat figure built like a sandhouse. On the shoulders was a wide, dished out face. Two greenish eyes glittered from crinkled, yellowish-brown skin. Jaw puffed and patched, and eyes bleary, the Sapper shot a look at Bender.

The Canadian met his enemy's eyes without flinching. Then Shannon was saying:

"All right, Frane. Here's your man."

Bender saw the squat figure coming at him with a gorilla-like, lumbering walk. His heart almost stopped.

"Townley," Shannon snapped, "meet Mr. Frane. You'll work with him."

Bender took the broad hand the Sapper reached out.

"Glad to meecha."

EXCEPT for a few hours that first day, George Bender, *alias* Townley, saw little of the Sapper, and he wasn't sorry about it. He didn't like the way those glittering snake eyes watched him. They made chills creep under his scalp.

"You work with me, an' you don't," the Sapper growled. "You play a lone hand. So do I. I tell you what to ride, when an' where to ride. You ride. You report to me an' compare any notes you got. Any clues you pick up. See that box over there? That's where you get instructions when you're in town. You wire for instructions when you're on the road. Got all that?"

Bender got it. The Sapper sent him to another bull for full information on the robberies to date, the cargo and the amounts involved.

The dope wasn't exactly to Bender's liking. He found out where the records were and went into them himself. He went around with his heart in his mouth, and a dread that any moment his true identity might be revealed.

His search of the records told him that the thieves were choosy. They took only imported silks. Underwear, hosiery, some dresses, cigarettes. But stuff that didn't come in very large cases. Stuff that could be gotten away easily, even in a light truck or station wagon. You could get many thousands of dollars' worth in a small conveyance.

Robberies had occurred at no one special place. The gang struck suddenly and knowingly. They never missed. First here and then there. They never took large quantities. Ten to fifteen thousand dollars' worth at a time. They struck often.

Bender, on his first ride, drew an eastbound freight train carrying mixed cargo. He kept a close eye on it half way over the division. He watched the conductor, whose name was Barry. When he got a chance, Bender remarked:

"I've just read the dope in the files on a man named Speed. Maybe you can tell me what sort of chap he was."

Bender had a nice way with him, a disarming way. Skippers never have much use for bulls, and certainly don't go out of their way to help them any, but this Barry chap was talkative.

"Maybe I'm talkin' outta turn, fella," said Barry, "but I don't hardly see how Jack Speed coulda done anything like that. Still, it looks like they had it on him, an' Jack always was his own worst enemy. The brass collars said we couldn't carry the brothers. Jack carried 'em. You know. That's why it's hard to think mebbe Jack'd steal. Or be in with anybody that did. Never much gumption. Pretty good skipper, an' the hogheads liked him, which is sayin' somethin'. But human nature's funny. You never know. Why, I lived next door to a feller that worked in the post office. Church member, he was. Nicest guy you ever saw. An' one day he didn't come home any more, an' they had him for . . ."

BENDER had to be careful. On his third day he almost fell over the conductor he'd talked to at Severn the

afternoon he'd met the kid. He turned quickly and hoped the con hadn't recognized him.

Bender asked more guarded questions. Nobody was convinced that Speed's arrest had been on the level. Some of the conductors felt like the Sapper was forced to make a showing and hung it on Speed because things were getting hot for him and he had a long grudge against Speed anyhow. They didn't come out and spill it in so many words. They didn't trust a bull enough to say that. But you could put two and two together. Bender did. He saw everything clearly.

Keeping his eyes open, the Canadian rode the long freights through the night, the wheels drumming out their rolling song in the dust of the ballast beneath him. Twice he dropped off at the lonely cabin called Chaparral for short chats with Laura Speed.

The first time he frightened her. She gasped and said: "Lord! A ghost!" And then she laughed while he explained to her what he had done since leaving her brother's house.

"I'd be all right," he told her, "if I could keep my heart out of my mouth. I wrote to Townley right off, and told him what I was doing. I ought to be hearing from him any day. I even told him to send me a bunch of old letters so I could have 'em on my person. Lord, if Chief Shannon hadn't been nuts with worry when I tied into him, he might've tripped me up on my ear. There I was, no baggage, no credentials. Just a lot of crust."

"You don't expect a chief special officer would be looking for an impostor to walk right into his office, do you?" Laura had returned. "Absurd. Tell me, how's it go?"

He told her how the men really didn't believe her father guilty. He said he had both eyes open to find anything that might reveal the real thieves, and enable him not only to clear Jack Speed, but also to go to Shannon and say: "Here, Shannon! I'm George Bender. I've cleaned this thing up for you, and now I want to explain how I happened to batter the hell out of the Sapper."

He felt eternally indebted to Laura for the lift she'd given him with the kid that night. From her he learned that Tommy was repairing nicely and that a deputy had casually drifted by the very next day to ask if she or her brother had seen anything of the Sapper's desperadoes. The deputy hadn't insisted on looking through the house, although Tommy was in the very next room.

The second time Bender saw the girl he was depressed. Said he was up against a blank wall. The only clue he had was the type of merchandise and the trains it was usually to be found in. Not another thing. But he would keep on trying.

He wondered if the company would give him a train job when he could really establish his identity. If not, he supposed he'd drift on, to greener pastures, to—

Laura looked at the desert moon wistfully, and sighed:

"Must you move, Boomer?"

He fought down the desire to shout, "No!" Instead, he stood there quietly, watching her, wishing he could put his arm around her and tell her to blow this job and come with him. Where to? A boomer had to trim his wings and light before he could say that to a girl.

Then he saw Laura Speed the third time, at the end of his eighth day. He saw her lamp in the cabin window, and if he hadn't . . .

IT was a sultry night, with sand in the wind. The desert dust was in for a stinging blow that would inflame head and nostrils if you stayed out in it.

Bender, eyes already smarting from the exposure, was in the yard office at Severn. Two sections of No. 609, the merchandise train, were coming in. The Sapper was bent over the way bills examining them. The conductor had dropped them off the first as it curved through the yard.

Ten minutes later, the second skipper came in from the east with his. The Sapper looked through those also, and Bender, rubbing his eyes, happened to see the Sapper make a hurried note on the paper before him.

The Canadian sauntered over. He reached for the bills. It was part of his job to know where the hot stuff rode. As his hand rested on the sheaf, Frane looked up with a peculiar glitter in his eye.

"First section for you, Townley," the Sapper said, his voice oddly strained. "Here's the bills, if you want to look at 'em. You ride the first section, an' see that nothin' goes wrong with it. Some hot stuff there."

Bender saw the hot stuff in the billing, but it wasn't the sort that thieves had been preying on. He was curious about the second section, wondered why the Sapper had kept the bills of that train away from him.

He went out the rear door to saunter over to the track on which his train waited. It wouldn't go out for twenty minutes. Plenty of time to make a check and see that all seals were intact.

Just outside the door he turned to look back. Why he turned, he didn't know. He saw the Sapper hand something to the telegraph operator. A strange foreboding came over him.

He hadn't heard from Townley, and he was worried about that. Had Jerry Townley thought him presumptious for using his name? Had Townley considered that just because Bender had saved his life once, he had no right to do this? There had been some reason for the Sapper watching him so that evening. He was sure of it. Now the Sapper had handed the op something.

Sweat formed big beads under Bender's hat band. He shoved his hat back. The air was terrible, the heat oppressive. It added to the sense of something evil impending. The boomer was about to continue when he saw Frane glide through the side door.

The Sapper paused, looked cautiously around. Bender was in heavy shadow. The Sapper had not seen him. Hurriedly the desert killer then swung about and started down through the yards. Bender went behind him, following some mysterious urge. Every action of Frane intrigued him.

The two trains were on neighboring tracks. The Sapper paused at the head end of the second section, Bender came up to the first. The job of checking seals was begun silently in the dark with small flashlights turned on them. The yard clerks were keeping just ahead of the bulls, making their check for later comparison.

When they reached the cabooses, the engines were on and the air being tested. Bender stopped and checked with the yard clerk. Every seal on both sides was intact on the first section. He had lost sight of the Sapper and the second.

The first section whistled off. Bender climbed aboard a box car. His most valuable stuff was automobile tires about the middle of the train. He would ride over there awhile.

Bender was on his way over when a movement down between his train and the next startled him. He dropped to one knee and peered. A dark figure, barely discernible in the gloom, near the head end of the neighboring train, was ripping a seal from a side door.

The Canadian's first impulse was to jump, grab his gun and flashlight. In fact, he was getting ready to scramble to the end ladder when he saw the figure move. He drew breath sharply.

There was just enough light from a distant arc to enable him to glimpse the number and initial of the car. It was a Union Pacific box. Bender photographed it on his mind. He watched the moving figure narrowly. He knew, he was positive, who had cracked that seal!

HE wasn't beyond the yard limit board until he was bitterly deriding himself for not having gotten off. Then he assured himself that he could have been wrong. It was, after all, pretty dark. Maybe the man had been putting on a seal. But, a little voice argued, a man doesn't put on a seal stealthily in the cover of blackness!

Bender watched through the dark as the wheels kicked up dust, and the sand smarted in his nose. He wore goggles to protect his eyes from the blow. The train covered ground with blazing speed, taking all advantage of the mesas to make up for the drag on the grades. There were few grades this side of that long one up past Chaparral.

It was on that long one that Bender picked up Laura's hidden signal. Her lamp was in the window of the telegraph bay, facing the oncoming train. Something was moving back and forth in front of the lamp. He saw it from well down the track.

The light acted, from a distance, as if it might be cutting off and on. As the boomer neared it he read Morse code in the peculiar movements. He read "BX" which was his personal signature in code. It was being repeated swiftly, deftly. It told him that Laura knew he was aboard First 609, and she was doing her desperate best to say that she had something for him. Something he must know.

Bender didn't hold back. His feet fell over the side of the box car he rode, found the ladder rungs, scrambled down. He was near the middle of the train. He found the footing safely, ran across the brief platform, and met her at the telegraph cabin door.

"What's wrong, Laura?" His hands closed over hers.

"The kid, Tommy." She was breathless. "They've got him."

"Quick. Tell me how!"

"*They're waiting at San Jacinto for you, too!* Oh, it's terrible, George!"

The train was clanking by slowly, climbing the grade. They had to talk loud above the noise of the wheels grinding over the dust that partly covered the rails.

Bender said: "Let me have it. From the beginning."

"I don't know much," Laura responded. "A half hour ago my sister-in-law came over out of breath. She said a gang of deputies had taken the kid. They arrested Pete, too, on a charge of harboring a dangerous criminal. The deputies told Pete that the railroad police had just found out you were Bender. It seems they compared fingerprints on your wallet with those on the office furniture. Mr. Shannon, the chief, wrote to Chicago for references, and Chicago wrote back that Townley was a good man, only the

man at San Jacinto couldn't be Townley because Townley had come back to work at East Chicago just a day or so before the letter showed up."

Bender felt his heart stop, turn over, thud leadenly against his ribs. All he could say was, "*Trapped!*"

"Unless," Laura added eagerly, "you run for it now. They'll be waitting for you in San Jacinto to unload from First 609. Oh, what will you do, George?"

Bender suddenly knew what he would do. He'd go to San Jacinto, but not on First 609. He'd ride the second—on a car with a broken seal—and the Sapper would ride with him!

The Invisible Hand

BENDER was in a clump of mesquite when the second section's engine battled up the hill past him. He stayed out of sight of the engine lights, and when a third of the dark train had rumbled by him, he raced along in the deep dust drift, grabbed hold and swung aboard. The wheels ground savage music out of the thin coat of dust over them, the dust muffling the usual sharp cadence.

Reaching the tops, he lay flat on his stomach. He knew three things: First, Frane was present somewhere in the darkness. Second, this train contained a Union Pacific box car laden with costly French imported lingerie consigned to a big California store. (Laura had gotten this information for him from the Severn chief yard clerk in a private and very confidential telephone conversation.) Third, the seal on that car had been cracked after a full seal inspection had been made by Frane and the yard clerk in the Severn yards. Why?

Bender only knew one answer. The gentleman who cracked the seal had done so to enable other gentlemen to get into the car's cargo. The seal had been cracked in Severn yards because the thieves couldn't get to it handily anywhere else.

All right, but someone had to get the car open, didn't he? How could he do that while running? There was only one solution to that, but Bender didn't even entertain a hope that it could be correct. The solution he saw was that somebody undoubtedly had got into the car immediately after the seal was broken, riding there for the purpose of shoving out a few cases of goods at the proper time.

The proper time! The proper place! That's where Bender wanted to kick himself. He could as easily have ridden the second section out of Severn. He would have had to keep out of sight of the Sapper, provided the Sapper stayed with the train. Even at that, he would have been on hand for the unloading, if such were the intentions of the seal cracker.

Bender moved cautiously back over one car at a time. He realized perfectly the dilemma he was in, provided all his conjectures were wrong and the Sapper found him sneaking over the roofs. He grasped all that, and the sweat dampened his shirt.

Then with incredible speed, things began to happen, some three miles west of the telegraph cabin. There the train started winding through a narrow gorge. Alongside the track the river flowed for perhaps two miles, crowded in the gorge to a deep, swift current.

In this gorge Bender came to the Union Pacific box car. The darkness was intense, but by staring at the car end long enough he could make out the small silver stencil which told him number and initial.

Now to bring his small flashlight into play for a quick glance at the side door on the right where he was sure he had seen the seal cracked! He was just getting the thing out of his pocket when—because of the muted cadence of the wheels in the dust—he heard a sudden screech.

Almost beneath his fingers, as he lay there, on the car roof, the side door was moving back on its track. *An invisible hand, inside the car, was sliding the door open!*

Bender waited no more. His theorizing, at least in part, had been correct. One or more robbers were in this car. Probably desperate men. They were getting ready to unload a case or two of the costly cargo. If he could trap them . . .

There was a flicker of light along the right-of-way at the river bank. It came and went quickly, as if in signal to the man or men inside that car. The train was running a shade under twenty. The long grade would soon be topped.

Bender saw the scene in a flash. A boat in that river. Loot loaded on the boat. Looters leaving the train and joining their companions. All in a flash. Discovery of the robbery would be made on arrival at San Jacinto. Two hours from now. That's the way it had been figured. Nobody had counted on Bender.

THE Canadian whipped out his gun, leaned far over the side. He saw the yawning black patch which was the open door. He listened for voices but heard none. The car came up to approximately where the flash of light had originated.

Bender poised his gun. A movement. A case at the door. Bender threw all caution to the wind. A lookout on the train to cover these men up? Yes, but he couldn't worry about that now. If he could keep whoever was in that car in there for the next mile and a half, the train would be over the roof of the mesa, and the speed would keep them there for the rest of the trip.

Spat! Bender let go one shot into the car at the very door. He heard a mad yell. The case of merchandise stayed where it was. He held his gun in readiness.

Then a spurt of flame from inside the car and a bullet ripped along the wood at his face.

Almost immediately there came two shots in quick succession from the river bank. Guided by those, Bender blazed at the dark blobs of shadow down there in the gloom.

Again he thought he heard a yell and then he saw the case of merchandise dumped. This time he fired at the figure he could barely make out at the door. There was no answering shot, no yell this time.

The boomer grinned. He saw the heavy case bounce on the rocks along the ballast, roll crazily down the bank of the river, hit with a splash.

Then his grin died. A bullet grazed his coat, tore through it. He sensed this new danger before he even saw it. Blue spurts of flame were right in front of him on the tops.

He tried to get to his feet, firing as he did so. His gun jammed. The dead click. *His last shot!* Another bullet staggered him as he hurled the gun at the head of the approaching giant.

Despite the reeling of the car, his aim was accurate. The ominous desert shadow staggered backward. Again the gun spurted flame, but the bullet was wild. And then Bender, fighting, kicking, lunged into the great hulk.

Even as the powerful arms sought to close around him, George Bender knew it was he and Frane to the finish.

The Sapper had broken that seal. Nothing else on earth moved through the night like that gorilla. *The Sapper had been in on these burglaries. He had been slugging and killing innocent men in a blustering attempt to make others believe he was gradually showing the gang up.*

It was hard to get his piston-like fists going. Bender knew the Sapper would kill him if he got the chance, would kill him and then talk to reporters tomorrow about the end of the desperate Bender who had been parading as a special agent while he directed a merciless gang of thieves.

That would be the Sapper's story, and he'd have Bender's body to show.

Those others? The Sapper would see that they got away. Oh, yes. Like hell, he would! Because, Bender swore, it would be the Sapper who died. The Sapper would die if anybody did.

Bender had the advantage of height, and given a place to use it, his speed of foot might have helped. But the top of a swaying box car offers few opportunities for scientific fighting.

The Canadian realized all that as he got in one to Frane's hard jaw. That it hurt he was aware when the Sapper's hold on him, for the moment, was relaxed. Just as he sought to step back for another mighty wallop, his antagonist closed again, drove straight at Bender's throat. The two went down with a thud when the train swung.

They lit heavily on the very edge of the roof, Bender on top of his opponent. But the Sapper's fingers never let go their death grip on Bender's neck. They hung to the roof of that car, Bender seeking to plant a blow while the blood congested in his brain and his wind was cut off.

Finally, in one desperate hope, he dropped limply over to the killer's side His ruse worked. The Sapper, swinging about then to get into a better position away from the edge, let go.

Watching for just that break, the boomer swung. He caught Frane on the knees, caught him in the pit of the stomach. The Sapper staggered backward. Bender followed up with a smash to the heart. Then, reaching out, he sought to grab the Sapper's coat. *Too late!*

With a shriek, Frane, the Sapper, went backward into space, clawing at the darkness. He went backward, hurtling to the rocks along the bank.

Bender staggered weakly to the center of the car. He tugged out his bull's-eye flash. He turned it on facing the caboose, hoping that someone in the cupola could see it. Then he started swinging a washout stop sign. Presently a bang went through the train. The air was on the wheels.

At the terminal, bulls were waiting

to arrest him, but the freight crew told them the whole story he had gasped out before lapsing into unconsciousness.

GEORGE BENDER walked up and down the bare office. Now and then he shot a quick glance at the door. On the door was the lettering, "A. J. Shannon, Chief Special Officer." Once, hearing footsteps in the hall, he turned to Laura Speed, who sat there waiting tensely. The footsteps passed, the door didn't open. He heard Laura catch her breath, and went over to her.

"Oh, George," Laura gasped, "do you think he'll—he'll talk?"

"If he doesn't—"

Bender broke off. The door opened. In came Chief Shannon. The weariness in his eyes had given way to a certain fire. He looked from one to the other of his visitors.

In hushed tones Laura began: "Please, Mr. Shannon, did—did—"

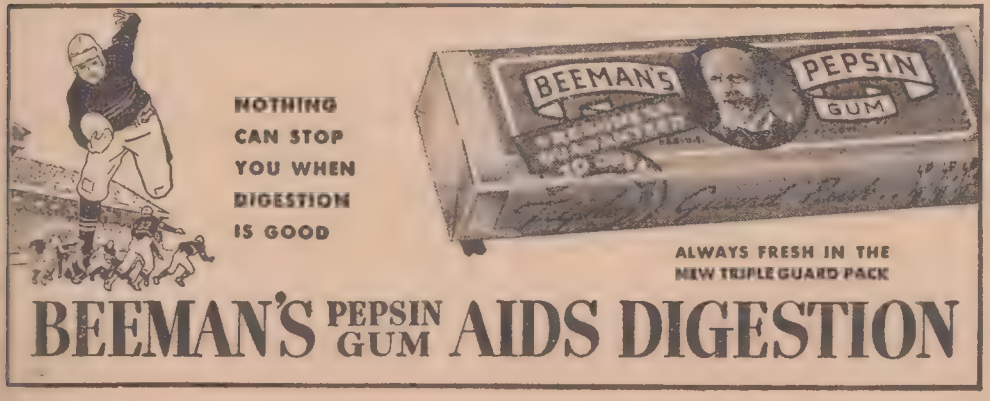
"Yes," Shannon replied. "The Sapper talked. When he was sure he was going to die with his back broken in two places and other injuries, he talked. He made a full statement to the district attorney. Your dad's in the clear, Laura. Framed plenty. If I'd ever had an idea that the Sapper framed him, I'd've killed Frane."

"Thank God," Laura said fervently, "dad can come back now."

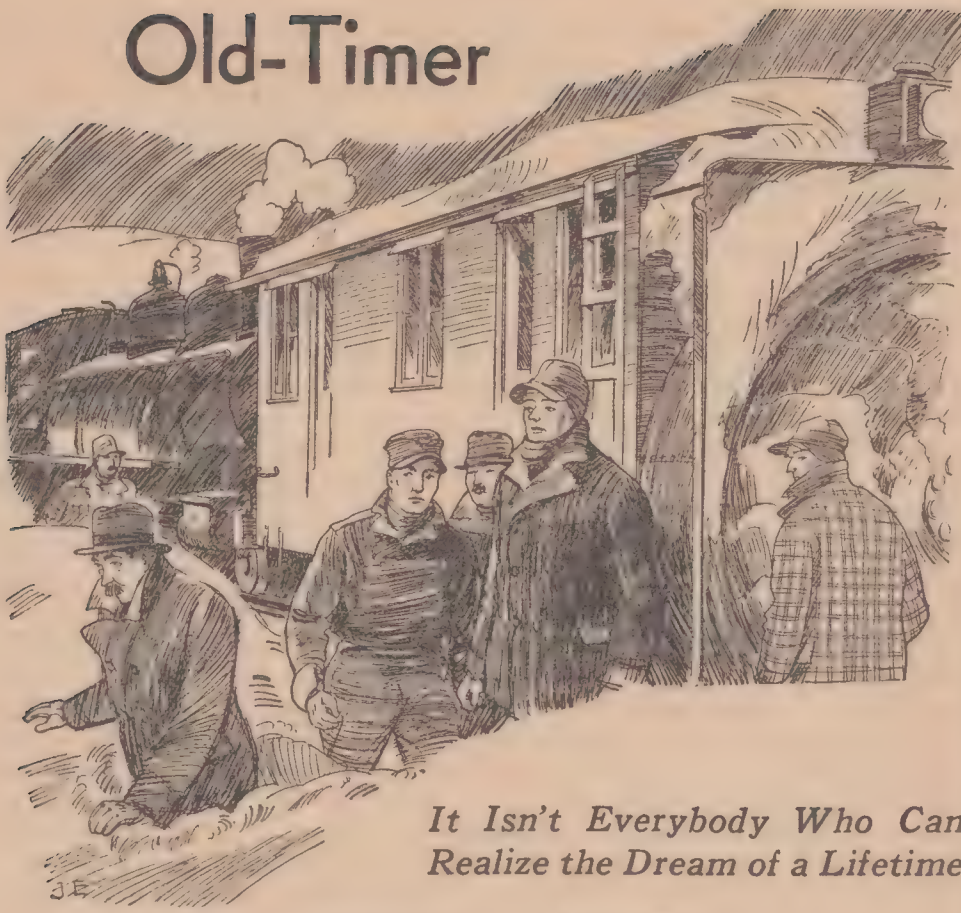
"Thank Bender, too," Shannon suggested. He turned to the big Canadian boomer. "I sure can't say enough, Bender. I sure can't. Last night, when First 609 came to town I had six deputies out there to take you—the same six who tried to do it when the second section came in. But you brought the Sapper, the man you wounded in the car, and the one you drilled through the head by the river. So you had plenty evidence that you'd done something. Listen, Bender, if there's anything on this railroad it's in my power to give you—"

"There isn't," Bender said, his freckled grin breaking. "There's only one thing the railroad can give me, and I've already got it. While you were over at the hospital getting the Sapper's statement, I talked to the super. I'm going to work in the dispatcher's office tomorrow. And Laura's turning in her resignation, effective this date. I've got all a man can ask in this world to be happy, chief."

He looked for a long moment at Laura's radiant smile. Yes, tomorrow he was going back to brass-pounding. His boomer days were over.



Old-Timer



It Isn't Everybody Who Can Realize the Dream of a Lifetime

By GILBERT A. LATHROP

Ex-Fireman and Brakeman, D.&R.G.W.; Author of "Tallowpot!" etc.

WINTER hit Alpine Pass softly and unobtrusively. Snow fell for forty hours, giving way at last to a brilliant sun and a day of jeweled whiteness.

The morning after the storm cleared up, Old Tom Hansen, engine watchman at Pitkin, shoveled a few crooked paths around the roundhouse.

Old Tom was a fixture on the South Park Railroad*—a slim-gage line which squeezed through the narrow-walled canyons of the Colorado Rockies, to perch on the gravelly hillsides leading toward Alpine Pass. Little thirty-ton engines it had. And twenty-five-ton box and coal cars hardly big enough to show up alongside standard-gage equipment.

When Old Tom wasn't at work he was usually in the wheelless box car he called home or in the foreman's office listening to the enginemen "on the spot." The latter paid no attention to him, and Tom rarely put in a word of his own.

Let 'em ignore him. The watchman

** Denver, South Park & Pacific R. R.*

had one very dear friend—who eagerly drank in every word he had to say—Jim Malone, the nine-year-old son of Dan Malone, section boss at Pitkin. There were hours after work when young Jim would sit perched on a soapbox in Old Tom's box car, face clasped between two soiled little fists, and listen to the grayhead's stories of railroading on other pikes.

In all of those stories Old Tom was a full-fledged hogger, and a mighty good one, to hear him tell it. Now he would be at the throttle of a fast transcontinental passenger train wheeling 'em through the night. Again he would be pulling a long string of tropical fruits north from the Gulf.

"Why ain't you engineer these days, Uncle Tom?" Jim asked him one night at the end of an unusually thrilling narrative.

"Never question your elders, Jimmy, my boy," said Old Tom a trifle sharply.

A SNOW-BUCKING outfit consisting of three little engines and a flanger was ordered to clear the track over Alpine Pass. The engine which would get the brunt of punishment carried a wedge plow bolted securely to her front end. This plow, an ungainly steel butterfly, almost completely obscured the view of her crew.

As the snow special whistled out of town Old Tom stood in the small door cut in the larger one of Number Two stall and watched them chuff toward the east. Long after they were gone the rattle of their exhausts could be heard plainly.

One of the engines would slip her drivers against the icebound rails and her chuffing would become a roar. On such occasions Old Tom would close his eyes and mentally watch them smash into a deep drift, battle it until it was all thrown out of the track.

At noon, when Old Tom crossed to his box car home, he stopped in at the depot.

"Any word from that wedge plow outfit?" he inquired of the operator.

"They passed Woodstock about ten minutes ago," was the response. "Blowing cats and dogs up there."

Again that night, when he went off shift, Old Tom asked the same question.

"They was plugged most of the afternoon half a mile above Woodstock," said the brass-pounder, "but they bucked through an' are battlin' drifts somewhere above there right now."

Later in the evening, while the thermometer tried to punch all the red liquid out of the bulb on the bottom, and cold so bitter that timber on the hills surrounding Pitkin exploded like little cannons, young Jim came over to Old Tom's box car.

"Did you ever buck snow when you was an engineer, Uncle Tom?" the kid wanted to know.

Old Tom's leathery face crinkled like crêpe paper and he settled back preparatory to spinning another yarn.

"I'll tell the world I did. Once when I was runnin' a' engine in the Canadian Rockies—" and he was off. He had a gullible audience and would make the best of it.

THE following morning Old Tom again inquired about the snow-bucking outfit.

"Just got a line on 'em," said the operator. "They bucked through almost to this end of Alpine Tunnel an' plugged. They got the section crew openin' up the wye so they can turn an' get back to here. The rotary plow

has been ordered out of Gunnison. Guess nothin' but th' big wheel will clear th' line."

Old Tom walked toward the roundhouse. Carefully he went over his iron charges, trying the water gages and looking at the banked fires of each one.

While thus engaged, he heard above town the shrill whistle of the returning snow special. He was in the foreman's office when the tired crews came to register.

"Snow bad?" asked the foreman.

"Bad?" spat the hogger of the wedge plow engine. "I've hammered over Alpine Pass sixteen years come next May, an' it's the worst I've ever seen."

Shoved by a single locomotive, the rotary plow arrived from Gunnison about two P.M. Old Tom was outside watching them chuff slowly up the main preparatory to backing in on the cinder-pit track.

The massive, steel-bladed wheel on the front end of the rotary revolved slowly and with much clanking. Old Tom knew that if the wheel were allowed to halt it would freeze tight and thus create a long thawing job with a steam hose.

"Get four engines ready to shove the rotary up the pass," said a gruff voice. "After you've done that, get yourself ready to go along with 'em as watchman."

The old fellow turned to find the foreman speaking to him.

Tom nodded. After the engines had been made ready for the task ahead, he crossed to the depot before going home. The section boss's son, along with a dozen other boys of various ages, were grouped on the platform gazing with admiration at the rotary.

A grimed man wearing a blue bandana handkerchief tied around his neck came from the depot. At sight of Old Tom he halted in indecision, then gave a smile of recognition and advanced with outstretched hand.

"Old Tom Hansen!" he ejaculated. "What in all get-out are you doin' pokin' around this God-forsaken hole in the mountains?"

"I'm engine watchin'," replied Old Tom, shaking hands.

Jim Malone edged closer. "He's watchin' engines up here," the kid defended, "but he's a great hogger just the same. He's pulled passenger trains, fruit trains and every other kind of train. Ain't you, Uncle Tom?"

Old Tom shifted from one foot to the other. His jaws worked nervously and he tried to grin acknowledgment.

The stranger guffawed. "Hogger it is now, huh?" he said boisterously. "Th' closest you ever came to runnin' was shovin' a scoop on a yard goat. How long did yuh fire a switcher on th' Burlington?" The last shot was leveled directly toward Old Tom.

The veteran licked at dry lips. "Most nigh twenty years," he admitted.

"An' when yuh lost out there for messin' up a signal yuh came here an' took on a job as engine watchman," went on the stranger brutally.

Some of the adoration in the eyes of Jim faded and his lips quivered. "But, Uncle Tom," he pleaded, "you was a engineer on all them railroads, wasn't you?"

Old Tom tried to smile, but the effort was sorry. "They was right good stories anyhow, wasn't they?" he gulped and turned back to his car.

Old Tom felt like a statue suddenly tumbled from its pedestal. Jim had been his only admirer. Now the kid knew him for what he really was, a roustabout in a roundhouse.

The old-timer had built himself to heroic proportions in the youth's eyes. He'd almost believed some of the stories he'd told himself. It was a fact that he'd always wanted to pull a throttle, had dreamed of such a day all his life. The closest he'd ever come was while firing the lowly switch engine on the Burlington. Rotten breaks, nasty luck, all had conspired against him.

WHEN the rotary plow outfit finally chuffed from the cinder-pit track, Old Tom rode the rear platform of the caboose. As they passed the depot he saw Jim watching the outfit. Jim saw the old fellow and lowered his eyes.

Tom quickly went inside to try to forget the whole business in the rumble of frozen wheels below and the mumble of soggy, wet exhausts from the engines.

Their going was slow. The rotary wheel had been speeded up since leaving Pitkin, and vibrations from the heavy cutting blades registered throughout the train's entire length.

Exhausts from the shoving locomotives were slow and spaced far apart; those from the rotary a staccato roar. A white plume of snow shot from the left side of the hood to hiss into the blanket which covered the hillside half a hundred feet away. Night fell while they were still within hearing distance of Pitkin.

Darkness brought no respite from the grind. The outfit fought its way forward inch by inch, stopping often to allow the rotary fireman to blow up his lost steam.

Woodstock found them sixteen hours out. After taking water on the rotary and engines, the exhausted crews tied up for rest.

Old Tom went to work, cleaning fires clinkered solidly over the grates, banking fires, making sure all heaters were working so no pipes would freeze on the engines.

At the expiration of their rest the crews resumed duty while Old Tom waded back to the caboose through the snow and turned in.

Another sixteen hours passed, and the outfit was a mile below Alpine. The track here hugged close to the north side of a towering mass of slide rock. During the past twenty-four hours a number of slides had avalanched down from above, covering the main line deep with packed snow.

Old Tom, who knew slides, saw they were "clean" from a point of vantage in the caboose cupola. Had they been "dirty," rocks and logs were sure to be buried in them, creating a real hazard to the blades.

The rotary bit into the first of them, wormed her way deeper and deeper. Suddenly there sounded an anguished whistle. The outfit clanked to a halt. Three blasts from the rotary, and they backed slowly from the slide.

Halted again, Old Tom saw the rotary crew scramble from their posts and make their way toward the big wheel. They grouped there, talking excitedly.

Old Tom dropped down and forced his way forward. "Plumb wrecked!" he heard the rotary pilot say disgustedly.

The veteran watchman grunted. "Plumb wrecked," was right. That slide had carried massive granite bowlders hidden under its innocent whiteness. Revolving steel blades had ripped into them, tearing the wheel to pieces, so it looked like an opened umbrella after a cyclone had torn the covering away.

"I'd say we're done," commented the rotary engineer.

The pilot nodded soberly. "Unless we can get enough men to shovel out behind so we can back to Pitkin," he growled.

At this the rotary engineer laughed mirthlessly. "Fat chance of that."

Floundering over, the conductor took in the situation at a glance and declared:

"We're done! We got just about enough grub to last another meal. We can't go forward and we can't go back." His voice trailed off in a string of burning profanity.

AS the rotary hogger grunted and started toward the steps leading to the pilothouse and warmth, the pilot scratched through his hair. Suddenly the latter's face brightened and his eyes fastened themselves on Old Tom.

"By crackey!" he exploded. "Just th' feller we need." His voice lowered. "You can beat your way back to Pitkin an' notify them fellers how we're plugged, Hansen!"

"You mean—" quavered Old Tom doubtfully.

"Sure! Hoof it down. It's only ten miles by th' railroad. An' by takin' a direct route it's less than four!"

"But the railroad's blowed full of snow," objected Old Tom.

"Makin' it necessary fer you to take th' short route. Th' south mountain side won't be deep with snow like this one. All yuh got to do is let gravity drag yuh down."

Old Tom wrinkled his brow in perplexity. Finally he said: "Guess I might try it!"

The rotary pilot slapped him on the back. "That's the spirit. I always knew yuh had it in you. An' when yuh get there, tell 'em we're plugged tight, broke down, an' danged apt to starve unless help comes quick!"

Old Tom pulled the collar of his coat closer about his head. Inwardly he tingled with pride. The rotary pilot had addressed him as an equal, had placed confidence in him. Always before he had been just "hey, there," or "Tom."

The veteran knew what he faced. Four miles of bucking drifts from two to six and seven feet deep, a temperature far below zero, a trail leading through the thick Immelman and Lodge Pole pine with masses of down timber. The prospect was not bright, yet Old Tom had no thought of refusing. He'd been asked to make the attempt.

"Yuh see," the pilot called after him, feeling probably that the old fellow was being imposed on, "not a man of us crews can leave. We're gonna try to shovel out to Alpine where maybe we can get around th' wye while help comes up. It wouldn't be exactly safe backin' down this mountain, even over a clear track."

Old Tom nodded and plodded onward.

"Good luck, Hansen!" the conductor called after him.

Another surge of joy coursed through Old Tom. Now he *was* an equal.

The snow was belly deep when he left the main line and headed toward the short cut. Fortunately the steepness of the mountain side was in his favor, and Old Tom was able to wallow his way through to the bottom of the little canyon.

Here he was forced to make a toboggan of his body and lie down, propelling himself with a swimming motion with his hands. Snow worked its way under his collar and crept against

his bare skin. It was colder than the air, which was almost thirty below.

He flopped across the snow-filled bottom of the canyon and finally staggered erect on the south mountain side. Here the snow was not over ten inches deep.

Old Tom faced the west and strode off. A biting wind, chill as the fingers of death, plucked at his cheeks and nose.

For almost a mile the going was not bad. Then Old Tom plunged into the first fringe of timber. Snow, light as down, blanketed the fallen logs and slide rock.

Several times his feet slipped through holes, gouging the skin from his legs. The forest seemed unending. He stumbled and fell dozens of times. The sun had dropped below a mountain range to the west, and harsh cold of timberline settled over the scene of wintry desolation.

Utterly exhausted, he finally staggered out on the main line half a mile above Pitkin. Only the fact he had been elevated to an equality with the engine and train crews up there on Alpine Pass kept the old-timer plodding forward.

It was dark when he entered the depot. The brass-pounder looked up, leaped to his feet and came outside.

"Thought you were up there with the rotary," he said.

"I was." Old Tom raised a stiff arm and mopped at his frozen mustache. "They're broke down, stuck, out of grub . . ."

WIND whistled down from the crests of Fossil Ridge, mourned through groves of skeleton aspens, swirled around piles of mine props and telegraph poles in the lower Pitkin yards. Then, howling derisively, it dashed up toward Alpine Pass where the night engine watchman roughly jerked Old Tom from exhausted slumber.

"They finally got hold of two engines, wedge plow an' Sixty-two," said the night man. "We got a crew for th' wedge plow engine, but th' foreman an' you are gonna run th' Sixty-two. You'll fire her. It's midnight, straight up an' down right now. You're called to leave not later than one A.M."

Old Tom sat up, rubbing the sleep from his eyes. Called to fire an engine, huh? Quite an elevation in industry, from roustabout to fireman. Just went to show what concerted effort might do for a man.

"I'll go," mumbled Old Tom, reaching for his trousers.

He found his engine, the 62, wheezing to herself over the cinder-pit. She was headed west instead of toward Alpine Pass. Coupled against her, back to back, was the wedge plow locomotive.

Old Tom got the idea. The wedge plow would smash out the drifts going up the pass, then the 62 would buck through them coming back.

Preparations went forward quickly and silently. The roundhouse foreman oiled around to the fitful glow of an oil torch.

They chuffed sluggishly from the cinder-pit track and halted in front of the depot.

"Got instructions to pick up all section men available and take them with us," remarked the foreman.

Old Tom grinned in the darkness. Two days ago the foreman would have pointedly ignored him. Tom Hansen was coming up in the world.

Jim's father, carrying a man-sized lunch bucket and a snow shovel, climbed up into the cab of the 62. Old Tom saw a couple more section hands

get on the wedge plow engine. When the roundhouse foreman finally came out of the depot with running orders, the section boss asked the boilerhead:

"Reckon I might take Jim along wid us? He's nutty afther actual experience wid snow buckin'."

The foreman hesitated. Then:

"It's up to you, Malone. The kid can stow away in this cab, I guess, but don't ring me in on it if trouble develops."

The section boss moved so he could poke his head out the cab window. "Come on, Jim," he yelled toward the depot.

Jim came, face beaming with happiness.

"The company has got another rotary outfit coming up the east side of the pass," the foreman remarked, and whistled off.

As they bucked their way ahead, wind promptly filled the track with snow behind again. This was no new experience for Old Tom. He'd fired a switch engine for years, so the use of the scoop came natural to him.

GRAY dawn hung over Alpine Pass when the two little engines finally bucked their way through to where the rotary plow waited on the main line. While Old Tom had been gone, the crews had managed to shovel out to the wye and then turn the outfit so it was headed toward Pitkin.

After the wedge plow halted almost against the front of the rotary, all the men dropped to the snow to hold a conference.

Old Tom followed the roundhouse foreman, not that it was any of his business what was decided, but he wanted to get away from Jim. In this he was unsuccessful. The kid followed.

"You're gonna have to buck out the track back to Pitkin without a plow," the rotary pilot told the foreman.

The latter grinned wryly. "I ain't much of a hogger," he said.

Old Tom looked to one side and found the kid gazing at him with mixed doubt and expectancy. The look was as much as to say: "Here's your chance to show all of 'em." At least Old Tom read it in that light.

"I'd like to handle the throttle from here down," he blurted.

A loud guffaw came from the rotary pilot. The roundhouse foreman looked his contempt.

Old Tom's raised head dropped and he began kicking the snow underfoot. As he kicked, decision crept into his old frame. This was his chance to right himself in the eyes of young Jim. What if it did cost him his job? He'd gain back the trust of the kid.

Suddenly, without a word, Old Tom strode toward the engine he'd fired up the pass. She was headed in the right direction. All he'd have to do was cut her loose from the wedge plow and open the throttle. Maybe he'd show all of 'em just what went into the making of a real hogger.

None of the other men paid much attention to him. They figured he was going to look after his fire and the water. He lifted the coupler between the 62 and the wedge plow and closed the angle cocks. Then he hauled himself up into the cab.

With grim determination he released the driver brakes. Then he blasted twice on his whistle cord and opened the throttle. The little engine responded by leaping forward down the four per cent grade.

Old Tom's lips warped into a grin of content. He had finally reached the ultimate, the thing he had dreamed of all his life. *He was actually running a locomotive!*

The 62 smashed into a six-foot drift, tore it into streamers of mist and fog, went through. Old Tom looked back. The balance of the outfit was following.

There was nothing wild about the way he smashed his way down the mountain. He handled his engine like a veteran, easing her around the sharper curves, holding her back on the track which was not blown full.

All the way down the pass he caught glimpses of the following rotary. They were not far behind when he halted before the depot.

THEN realization of what he had done came over the old man like a dash of ice water. He tried to ignore it, but it stayed with him. He walked slowly into the operator's office.

"Tell the dispatcher the whole outfit is back in Pitkin," he said with an attempt to be casual.

The brass-pounder nodded. "O. K. Another rotary outfit just reached Alpine Pass from the east." He began rattling off a message.

Old Tom started out to almost collide with the roundhouse foreman.

"Damn you!" blasted the foreman angrily. "I should fire you for running off with that engine, but since you put her down here safe I'll overlook it. It was a neat piece of work and you handled her like an old-timer. Go home and get some rest."

A gleam of triumph shone in the old man's eyes. Almost on Tom's heels came young Jim. The kid pulled off his heavy clothes and seated himself near the stove.

"Say, Uncle Tom," he said admiringly, "did you ever run a engine up in Alaska?"

And Old Tom smiled with joy. "Alaska?" he asked. "Sure. One time they called me to handle a passenger train out of Sitka . . ."

Hiram Walker & Sons

MANY people prefer blended whiskies—maybe you're one of them. And there is an increasing number who prefer Black Hawk. So make up your mind to try Black Hawk. You can be sure of its purity and quality—guaranteed by Hiram Walker. Try it today.

HIRAM WALKER & SONS
Peoria, Illinois

BLACK HAWK WHISKEY

This advertisement is not intended to offer alcoholic beverages for sale or delivery in any state or community where the advertising, sale or use thereof is unlawful.

85 Miles in 67 Minutes!

By EARLE DAVIS

Author of "The Ashtabula Catastrophe," etc.

Photo by H. Uecker, Milwaukee Shops, Milwaukee, Wis.

Meet No. 6402, the 326-Ton Old Gal Who Showed the World She Ain't Too Heavy to Travel

IS steam out of date? It doesn't look that way, judging from the new world record set by a regularly scheduled train on the Milwaukee Road last July 20th. This train, with Wm. H. Dempsey at the throttle, and running from Chicago to Milwaukee, maintained average speed of 92.62 miles per hour for the 61.4 miles between Edgebrook, Ill., and Oakwood, Wis. She averaged 76.07 m. p. h. all the way between Chicago and Milwaukee—85.7 miles in 67 minutes!

No other steam train in the entire history of the railroad industry is known to have averaged that speed for a distance of fifty miles or more.

The previous top notch record for sustained speed was held by the Great Western Railroad of England. In 1932 a G. W. R. R. train burned up the rails between London and Swindon, 77.5 miles, at the rate of 81.6 m. p. h. The highest speed it attained on that test trip was 92 m. p. h., although the English train was much lighter than the Milwaukee one.

The record - breaking Milwaukee train, headed by Engine No. 6402, roared along at an *average* of 90.06 m. p. h. for the 68.9-mile stretch between the two terminal limits—Mayfair, in the Chicago city limits, and Lake, Wis., the gate to Milwaukee.

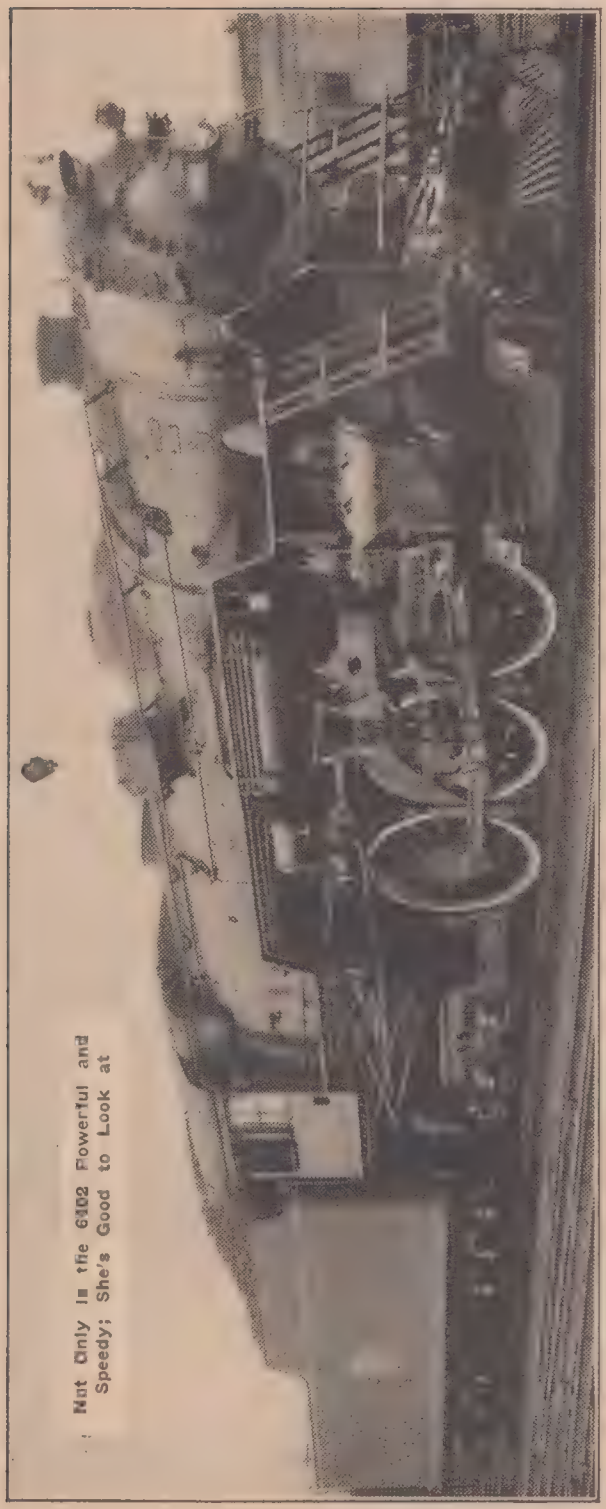
For two miles the speedometer recorded 103 m. p. h. as the train was nearing Milwaukee. The instrument used to measure how fast the wheels were spinning was a Weston voltmeter, which could register speeds only as high as 120. It was checked and verified by C. H. Bilty, mechanical engineer of the Chicago, Milwaukee, St. Paul & Pacific Railroad, and members of his staff.

The run was staged on a Friday, with the usual five - car train of roller-bearing equipment that regularly leaves Chicago Union Station at 9.00 A.M. standard time. In addition to Engineer Dempsey, the crew consisted of Fireman W. B. Kirby, of Milwaukee; Conductor Charles E. Albright, sixty-two years old, of Evanston, Ill.; and Brakemen Frank Peterson and Peter Mick.

A 4-6-4 locomotive was chosen for this run—the 6402, one of the twenty-two F6 and F6-a engines on the Milwaukee Road (Nos. 6400 to 6421 inclusive). She was built in 1930, with 26 by 28-inch cylinders, 79-inch drivers, 225 pounds boiler pressure, and 45,822 pounds tractive force.

On July 15th, eight days before the record run, the Milwaukee Road had reduced the running time between Chicago and Milwaukee on five of its trains to 90 minutes. Formerly 105 minutes were required to make that trip, and until two years ago it took 120 minutes. Before that, on most of the Chicago - to - Milwaukee trains the journey occupied nearly three hours. An engineer who made the run in an hour and twenty-five minutes, two years ago, was rebuked by the brass hats, and a bulletin was posted warning all engine men never again to attempt such speed. No wonder the busses, trucks and airplanes were lapping the cream of choice railroad business. The question arose: Is steam obsolete as motive power? It was up to

Mechanical Engineer C. H. Bilty, Who Designed the Milwaukee's 4-6-4 Type Engines, and Who Rode behind One on Its Record Run



Not Only Is the 6402 Powerful and Speedy; She's Good to Look at

the Milwaukee Road to show the world that there was still plenty of life in the old iron mare.

The new ninety-minute schedule is plenty fast, but Engineer Dempsey's performance cut twenty-three minutes off it. He did three minutes better than the brass hats had anticipated.

In addition to the crew and passengers and a group of newspaper reporters, a score of C. M. St. P. & P. officials were aboard the special, including:

Mechanical Engineer Bilty; George B. Haynes, passenger traffic manager; Norman A. Ryan, assistant general manager; A. G. Hoppe, engineer of tests; John C. Prien, general passenger agent, Milwaukee; and R. D. Miller, assistant superintendent of the Milwaukee Division.

THE 6402 was given rights over everything for her non-stop dash. Switches had been set and signals lined up. The track had been inspected with more than ordinary thoroughness. An extra force of maintenance of way men patrolled the right-of-way before the rail-scorching run. Other trains were "put in the hole" to let the flying comet swish by on the main stem.

Bill Dempsey opened her up wide as soon as he was out on the racetrack. Kirby,

also a hoghead, was keeping her hot.

Bill was going places, and gave his four-year-old iron racehorse free rein. Faster and faster the drivers whirred. Faster and faster the wheels spun over the shining steel on that never-to-be-forgotten midsummer Friday morning.

They were hitting 87 miles per hour just before they reached Morton Grove, Ill. Through that town they thundered to the tune of ninety.

A. G. Hoppe, the test engineer, and other official time checkers, watches in hands, strained their eyes looking out the windows of the coaches at mile-posts that danced by like the slats on a picket fence. Hovering around them were the other railroad officials and the newspaper hounds. Five minutes ahead of the regular high speed schedule they leaped in and out of Glenview, Ill. They were then making ninety-six!

"Ninety-six!" exclaimed Ryan, the assistant G. M., who was sponsoring the test run. "Watch us go over a hundred!"

He chuckled with pride and excitement. The passengers, too, had caught on to what was happening. A series of electric thrills swept through the whole train. Newspapers and magazines were laid aside, and passengers sat bolt upright.

At Rondout, Ill., they were hitting ninety-seven. A freight crew on a siding cheered and waved to the speed demon, but the passenger train was going too swiftly for anyone to acknowledge the greeting. The freight cars slid by in a blur of color.

At Gurnee, Ill., they climbed up to 100 . . . then 101 . . . and finally 103! The men eagerly watching the speedometer shouted like school kids at play.

"Watch her, boys!" cried Ryan, his dignity forgotten in the dramatic moment. "There she is! Look, 103! That'll be the limit. We could make 105, but we'll not have the chance. Going over Root River now, boys. Oakwood, Wisconsin."

They toasted the speed demon that hot July day with bottles of beer and glasses of iced lemonade. Railroading it was, and no violation of Rule G.

For a tense two miles they held to that high mark of 103. Then Dempsey had to slow down a bit. For, as Mechanical Engineer Bilty pointed out, it would take two and a half miles in which to stop their load of 390 tons. Including the engine, the train weighed 735 tons.

Toward the left veered the speedometer needle. Gradually the speed lessened. As they neared Milwaukee they were crawling at a mere fifty.

All along the road the Milwaukee employees left their jobs temporarily to line the tracks and witness the comet's flight. They swarmed out of roundhouses, out of shops, out of offices, out of stations. They cheered and danced and yelled themselves hoarse. The good old Milwaukee was riding into a new world record for speed on rails.

Aloft, a newsreel airplane was following the train. The movie camera men were making shots that would go down in history. It was this plane which gave the passengers their first hint that something out of the ordinary was happening. From that time on, their excitement remained at fever heat. When they finally pulled into the Milwaukee terminal, twenty-three minutes ahead of schedule, the passengers had the thrill of a lifetime. In years to come they will tell their children and grandchildren of that famous run.

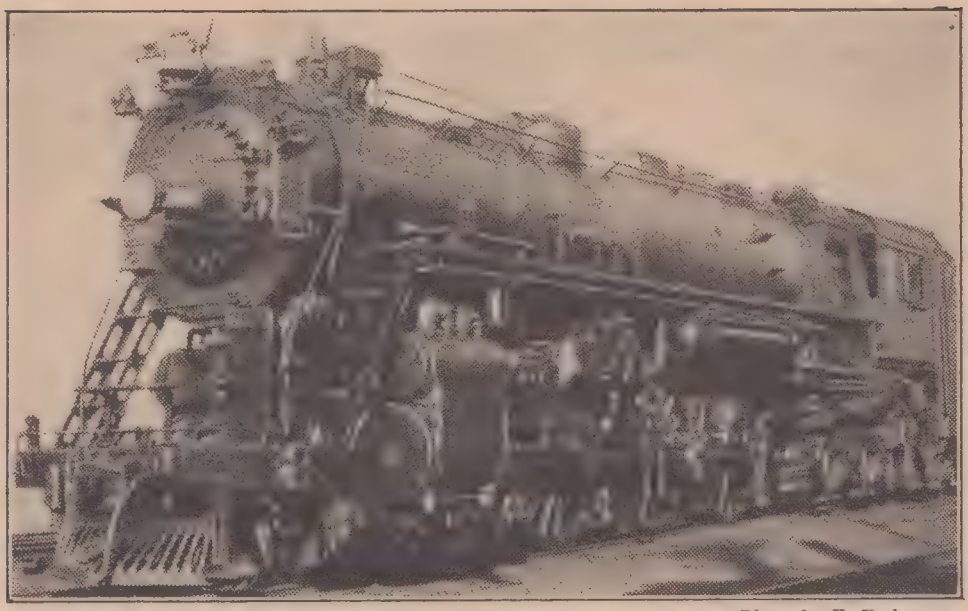


Photo by H. Uecker

Record-Breaking by the Milwaukee's 4-6-4 Types Isn't Confined to Speed Alone. This Engine, the 6415, Recently Hung up What Is Considered a World's Mileage Record. In the Thirty Days of November, 1933, She Ran 18,390 Miles in Regular Service between Minneapolis and Harlowton, Mont.! Since She Was Delivered in October, 1931, She Has Made about 360,000 Miles without Overhaul, and Is Good for Many More. The 6400 Series Was Built by Baldwin: Nos. 6400-6413, Class F-6, Were Placed in Service Early in 1930; Nos. 6414-6421, Class F-6a, about 19 Months Later. All Have Averaged about 10,400 Miles a Month

THE hoghead, Bill Dempsey, returned to his work as usual the following day—the day after he had made railroad history—modest in his achievement, and commented:

"It's all in a day's work on the railroad. . . . If only I'd 'a' had a few more cars to give braking power I could 'a' done better."

Bill is fifty-four years old, and looks forty-four. He lives at 1729 North Fifty-sixth Street, Milwaukee. For thirty-five years he has been with the Milwaukee Road.

After breaking the world's record, the 6402 was not allowed to rest, but left in service early Saturday morning hauling a special train carrying some 250 Ford dealers of Minnesota on their way back to St. Paul from a visit to the Chicago Century of Progress Exposition.

The purpose of the fast run, the brass hats explained, was to show the steam engine still had a bright future. However, the present fast ninety-minute schedule between Chicago and Milwaukee which is maintained by both the Milwaukee Road and the Chicago & North Western Railway will not be changed. At least, not yet.

As J. T. Gillick, C. M. St. P. & P. vice president in charge of operations, put it:

"We made that run by way of determining whether steam is out of date for hauling passenger trains. There has been much talk about the replacement of present railroad equipment with streamlined cars and motor propulsion. Now that we have satisfied ourselves as to what our present rolling stock can do we are ready to maintain our old schedule. There are a number

of highway crossings on that stretch, and I doubt if we want to make these crossings at excessive speeds."

Bob Scott, of Waukegan, Ill., got a big kick out of riding the record-breaking train. Bob is eighty years old. For fifty-six years he served the Milwaukee Road. At the time of retirement he ran the "Pioneer Limited."

Bob chuckled as he said: "About two years ago I made a run with one of these engines hauling thirteen cars, and say, listen! I made the trip from Chicago to Milwaukee in an hour and twenty-five minutes. I got her over ninety that time. The company turned around and issued a bulletin saying that no engineer should do it again."

The previous American record for speed over a distance exceeding forty miles was said to have been made in 1897, when a Lehigh Valley train averaged 80 miles an hour for the 43.9 miles from Alpine to Geneva, N. Y.

However, in 1892, Delaware, Lackawanna & Western Engine No. 134 made an unofficial record said to have been 80 miles an hour between Binghamton, N. Y., and Elmira, N. Y., 57 miles. It averaged 66.59 m. h. p.

Here's Something That Doesn't Happen Often: a Crew Is Congratulated by a Brass Hat for Fast Running! From the Left: Brakeman F. Peterson, Conductor C. E. Albright, Brakeman Peter Mick, Fireman Ward B. Kirby, Engineer Bill Dempsey, and Asst. General Manager Ryan

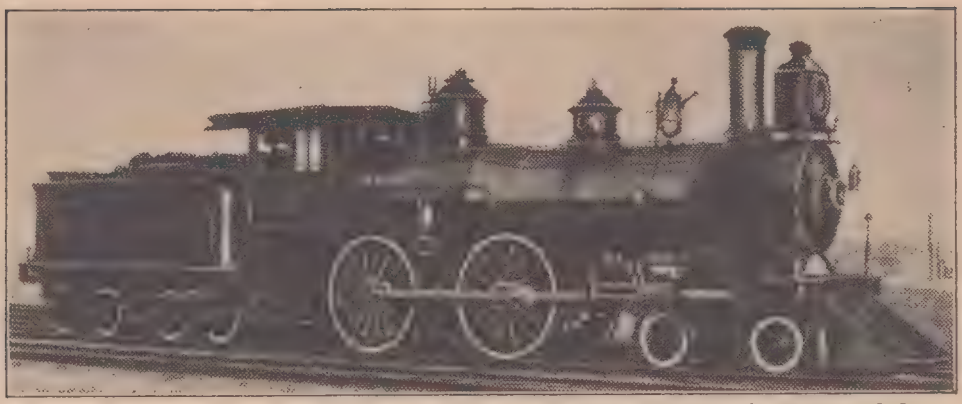


Photo from T. T. Taber, 43 Hillcrest Rd., Madison, N. J.

No. 134 Didn't Do So Badly, Either, When She Averaged 80 Miles an Hour for 57 Miles between Binghamton and Elmira, N. Y., Back in 1892. She Had 19 x 24 Cylinders, 73-In. Drivers. In 1899 She Was Renumbered 965; in 1904, 495; Scrapped in 1911

over the whole trip between Binghamton and Buffalo—203 miles.

The 134 was designed by Vincent P. Riordan, who is now (or was until very recently) living at 1465 Abbott Road, Buffalo, N. Y., and his engine was built in Buffalo, mostly in the Lackawanna's shops at East Buffalo, where Mr. Riordan was chief draftsman at the time. As news of the 134's great run came over the wire, he stood proudly beside a telegraph instrument. Afterwards he refused to part with his original calculations, blueprints and notes which he had made when designing the famous 134.

Billy Lonergan, engineer on the 134's fast run, told the story:

"We had a special car on behind in which the Old Man (General Manager W. G. Halstead) and all the rest of the officials rode, and when we left Binghamton I opened her up on the Big Flats. Well, sir, we were making eighty miles an hour. That special just flew; it didn't seem to touch the rails at all. It just straightened out behind like the snake in Mark Twain's story, 'Call a Man.' When we reached Elmira I got a message from the Old Man not to go a mile faster.

"'But, Billy,' Mr. Riordan asked me, 'how fast do you think you could have gone?'

"'Boy,' I replied, 'I don't know. I never opened her up wide.'"

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STRAIGHT KENTUCKY WHISKEY

NATIONAL DISTILLERS

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Locomotives of St. Louis-San Francisco Ry. ("Frisco")

The 4200 Series of the Frisco Is the World's Largest Mikado or 2-8-2 Type, Using Weight of Engine Alone as a Standard. It Is Also Among the Most Powerful. With Booster It Exerts 79,800 Lbs. Tractive Force

Engine Number	Type	Cylinder Dimensions (Inches)	Drivers Diameters (Inches)	Boiler Pressure (Pounds)	Weight without Tender (Pounds)	Tractive Force (Pounds)	Builder
1-60	2-10-2	29 x 30	63	200	411,300	71,480	Baldwin
72	2-6-0	18 x 24	50	180	108,800	23,800	Baldwin
73, 74	2-6-0	18 x 24	51	180	117,200	23,300	Baldwin
75	4-6-0	19 x 24	57	200	157,900	25,840	Baldwin
76-77	2-8-0	19 x 24	51	200	135,800	28,880	Baldwin
182-187	4-4-0	17 x 26	69	200	149,800	18,500	Pittsburgh
202, 204	4-6-0	19 x 26	69	200	134,000	23,100	Pittsburgh
210, 213	4-6-0	19 x 26	69	200	143,700	23,100	Dickson
221-228	4-6-0	19 x 26	69	200	143,400	23,100	Rhode Island
341-351	2-6-0	19 x 24	56	155	106,300	20,200	Baldwin
354, 355	2-6-0	19 x 24	55	155	112,000	20,800	Rhode Island
350, 360	2-6-0	18 x 24	55	180	117,900	21,600	Baldwin
365-368	2-6-0	19 x 26	57	180	135,900	26,000	American
430	4-6-0	19 x 24	59	145	97,000	18,100	Baldwin
438-447	4-6-0	19 x 24	64	165	132,200	19,000	Baldwin
467	4-6-0	19 x 26	56	200	133,500	25,600	Baldwin
479-484	4-6-0	18 x 24	63	180	130,000	18,900	Baldwin
488-490	4-6-0	19 x 26	63	166	130,000	20,300	Pittsburgh
491-498	4-6-0	19 x 26	57	155	121,000	21,700	Pittsburgh
503, 507-515	4-6-0	19 x 26	57	160	121,000	22,400	Pittsburgh
518-529, 621, 634-668	4-6-0	20½ x 26	63	200	173,600	29,500	Baldwin
549-556	4-6-0	20 x 26	63	200	149,600	28,100	Pittsburgh
560-565	4-6-0	20 x 26	63	190	160,000	26,700	Cooke
570-572	4-6-0	20 x 26	63	190	150,800	26,700	Baldwin
573-574	4-6-0	20 x 26	63	180	158,400	25,300	Pittsburgh
575-584	4-6-0	20 x 26	57	185	153,000	28,700	Pittsburgh
586-599	4-6-0	20 x 26	63	200	161,200	28,100	Dickson
600-604	4-6-0	19 x 28	69	185	161,400	23,000	Richmond
605-608	4-6-0	19 x 28	69	190	167,700	23,700	Richmond
611-619	4-6-0	20½ x 26	63	200	172,800	29,500	Baldwin
625-628	4-6-0	20 x 26	69	200	172,800	25,600	Baldwin
629-633	4-5-0	21 x 26	69	200	182,500	28,300	American
669-693	4-6-0	20 x 26	63	200	159,800	28,100	Dickson
695-699	4-6-0	21 x 26	63	200	197,800	33,300	Brooks
700-704	4-6-0	20 x 26	63	200	164,300	28,100	Dickson
705-724	4-6-0	21 x 28	63	200	197,800	33,300	Brooks
727-741	4-6-0	21 x 28	63	200	185,900	33,300	American
742-799	4-6-0	21 x 28	63	200	188,300	33,300	Baldwin
801-818	2-8-0	21 x 28	57	185	158,000	34,000	Dickson
819-828	2-8-0	21 x 28	57	190	161,300	35,000	Pittsburgh
829-833	2-8-0	21 x 28	57	190	160,300	35,000	Richmond
834-835	2-8-0	20 x 28	51	200	164,000	37,300	Brooks
850-851	2-8-0	19½ x 28	57	200	174,500	31,800	Brooks

Engine Number	Type	Cylinder Dimensions (Inches)	Drivers Diameters (Inches)	Boiler Pressure (Pounds)	Weight without Tender (Pounds)	Tractive Force (Pounds)	Builder
860-861	2-8-0	21 x 30	56	200	185,500	35,700	Brooks
870-871	2-8-0	20 x 26	51	180	157,500	31,200	Pittsburgh
951-955	2-8-0	21 x 28	55	190	171,000	36,300	Pittsburgh
956-965	2-8-0	21 x 28	57	200	174,500	36,800	Dickson
970-989	2-8-0	21 x 28	55	200	181,500	38,200	Baldwin
1000-1009	4-6-2	21 x 26	69	200	204,900	28,200	Brooks
1011-1014	4-6-2	21 x 26	69	200	210,100	28,200	Baldwin
1015-1039	4-6-2	24 x 28	69	200	225,500	39,700	Baldwin
1040-1059	4-6-2	24 x 28	69	205	262,600	40,700	Schenectady
1060-1069	4-6-2	26 x 28	69	210	312,000	46,300	Baldwin
1100-1111	4-6-0	21 x 26	69	200	188,850	28,300	Schenectady
1200-1265	2-8-0	22 x 30	57	200	198,000	43,300	Baldwin
1266-1305	2-8-0	26 x 30	63	190	237,000	51,980	Baldwin
1306-1345	2-8-0	26 x 30	63	180	240,000	49,300	Schenectady
1400-1409	4-6-0	23 x 26	69	200	190,000	33,900	Baldwin
1500-1529	4-8-2	28 x 28	69	210	342,200	56,800	Baldwin
1613-1632	2-10-2	25 x 28	52	180	210,000	51,500	Richmond
2001-2007	2-10-10-2	24½&30x30	57	200	418,000	83,500	Schenectady
3540-3548	0-6-0	19 x 26	51	180	141,500	28,200	Baldwin
3651-3657, 3676-3695, 3713-3722	0-6-0	19 x 26	51	180	120,300	28,200	Baldwin
3671-3675	0-6-0	20½ x 26	51	185	148,700	33,700	Baldwin
3700-3712	0-6-0	19 x 26	51	180	128,800	28,200	Dickson
3731-3752	0-6-0	20½ x 26	51	185	155,200	33,700	Baldwin
3800-3806	0-6-0	21 x 28	51	190	163,500	30,100	Schenectady
4000-4032	2-8-2	26 x 30	63	200	305,400	54,700	Lima
4100-4164	2-8-2	27 x 32	63	210	344,600	62,900	Baldwin
4200-4219	2-8-2	27 x 32	63	230	375,790	68,100	Baldwin

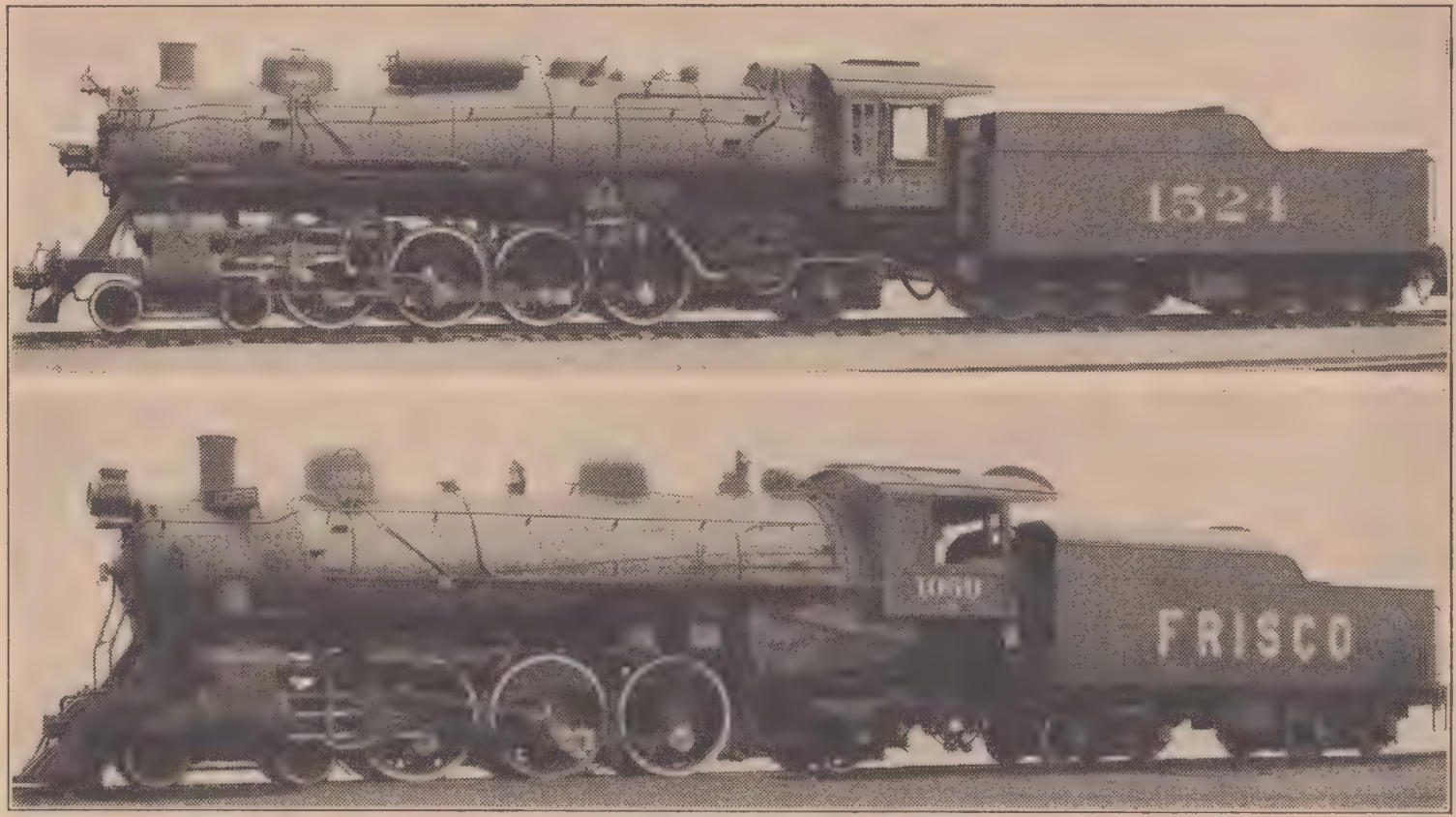
Total number of engines: 815

WORLD'S LONGEST STEAM-ENGINE ROSTER

THE L. M. S. Ry. of Great Britain claims the world's longest steam locomotive roster—8,300 locomotives of about 220 distinct patterns. A detailed roster would fill almost a complete issue of "Railroad Stories." As a matter of fact, the German and Soviet Russian states systems have bigger totals of steam power—around 22,000 and 15,000, respectively—but both those organizations are divided up into various territories, each with their own separately rostered motive-power stock. The L. M. S. Ry. tallies their lot in one straight series.

In 1923, when the system was formulated, they started in with 10,316 locomotives, 393 distinct patterns, a heap of which was junk that would have gone to the scrap heap but for the war. Keeping the gaps between the series as short as possible, the original L. M. S. roster went from 1 to 17995. A re-classification is now in progress, with the object of grouping all L. M. S.-built standard power below 10000. Obsolete power below 10000 is being re-classified by boosting the numbers 20000. The highest to be altered is No. 7841, now 27841. If they want the 9000 series vacant for future new power, then No. 9454 may have to become 29454. Did any locomotive, I wonder, have such a lengthy number?

Certain European countries include classification figures in the number—for instance, 231.500 of the French State Ry., and 18.500 of the German State Ry. In both those cases, the figures before the dot represent a Pacific type. In France "2-3-1" is the same as "4-6-2" of the Whyte system, and most French roads use 231 in front of the numbers of all Pacific type locos. In Germany, all obsolete Pacifics are rostered in Group 18, other types being in other groups, but starting at 001 in every group. Therefore, you couldn't reckon either French or German method as a "straight" roster. —F. H., Liverpool, England.



The Frisco's Largest Passenger Engines

These Two Are a Good Illustration of Modern Motive Power Tendencies. The 1524 (Upper) Is Just as Fast as the Older Pacific Types of the 1060 Series (Lower), but Can Pull a Much Heavier Train and Can Maintain More of Its Tractive Force at High Speeds. See Page 41 for Photo of No. 4210, 2-8-2 Type

NEXT MONTH: CHICAGO & NORTH WESTERN RY.

The "Pegleg" Railroad

By CHARLES W. LOGAN

THE Centennial Exposition, held at Philadelphia during the summer of 1876, was a fair of international scope. Queer inventions and new wrinkles of various sorts from all over the world were on display at the big show. Among the many models on exhibition was a new idea in railroading called a monorail railroad, that is, with a single-rail track.

It looked like a train running on top of a fence, which, in truth, it was, for its engine and cars moved astride an elevated track on a single rail. This rail was fastened to a wooden stringer resting on the top of upright posts, with guard rollers hanging down on both sides.

Its locomotive was of the saddleback type, the boiler was without a flue, the engine without a piston, and the driver without a crank. To most all of the people who observed this odd-looking contraption it looked like the incarnation of the impossible, and it was passed up lightly. But in spite of the general ridicule it received it was soon to get an actual trial.

Among the thousands of visitors at the show were two men from the "wildcat oil country" of Northwestern Pennsylvania. They were E. W. Codington and Col. A. I. Wilcox, of the new oil town of Bradford, which at that period was just starting to boom. The monorail idea might have looked foolish to the majority of people, but in the minds of these oil men it struck a responsive chord. They saw large possibilities in it, and they returned to their homes with a constructive plan.

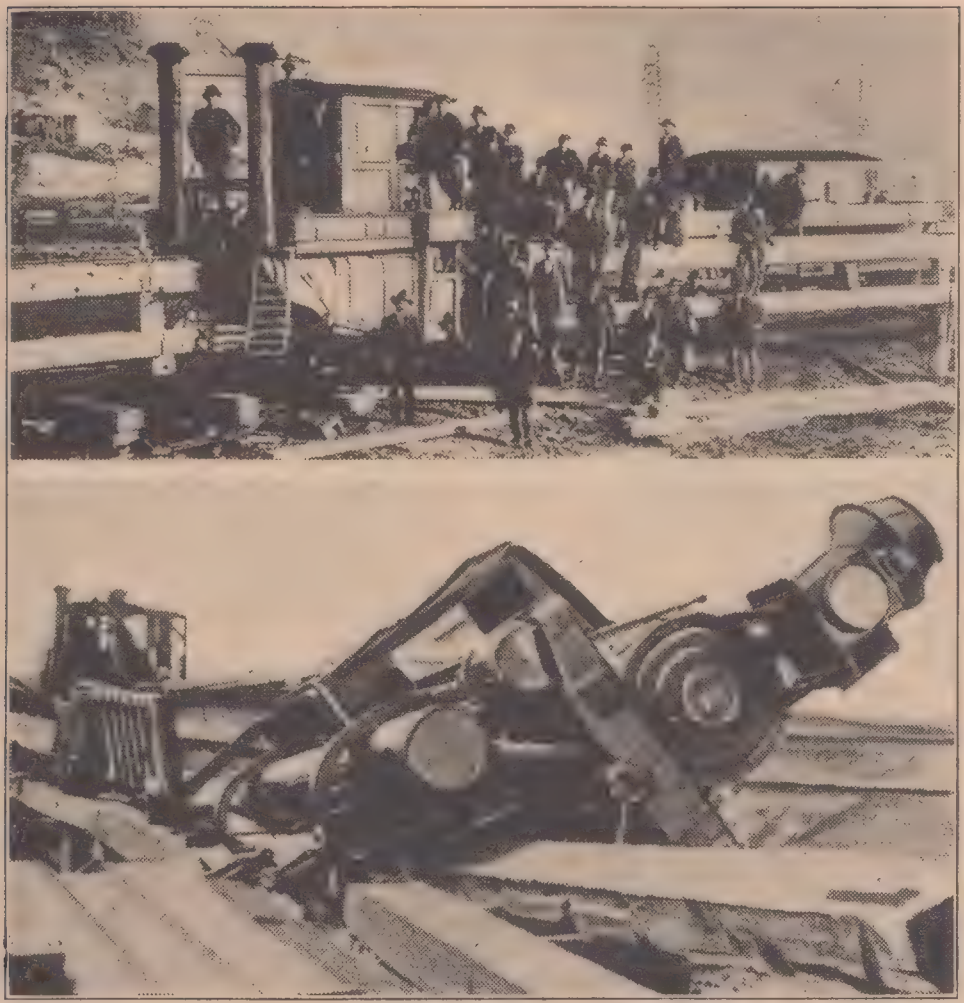
The country around Bradford was wide open. Mushroom oil towns were springing into existence over night; fortunes were being made and lost in a day; and people of all classes and creeds were pouring into the new El Dorado from far and wide.

Thousands of dollars worth of drilling and well equipment was lying on the ground at Bradford, an Erie railroad point, unable to be hauled by teams to its final destination in the surrounding oil fields on account of the mud. The few wagon roads in that section were almost impassable, and the mire in the streets of Bradford was two or three feet deep. Small wonder that Col. Wilcox and Mr. Codington could see success in this monorail.

At once they talked over the matter of its commercial usefulness with the inventor, and they were informed that a road of its type could be constructed through a level country at a cost of about $3,000 per mile; and that a locomotive also would come to about $3,000.

Back home they went, with a definite purpose in mind; they started to figure out the cost of a six-mile road of this type. They decided that about $40,000 would do the trick.

THESE gentlemen were of high standing in their community; their word was considered as good as their bond. When they explained the



Photos from Chas. W. Logan, 50 Euclid Ave., Bradford, Pa.

Two Rare Old Photos of the B.&F.B. (Upper) The Road's First Engine, "Col. A. I. Wilcox," As It Looked in the Summer of 1877, When the Line Was Being Built. (Lower) After the Wreck of August 15, 1878, When the Track Collapsed under Engine No. 2. The "Col. A. I. Wilcox" Can Be Seen in the Background.

new project to other influential men, some of whom had been at the Centennial and had seen the working model, their proposition went over. A company was quickly set up. It was called the Bradford & Foster Brook Railway Co., and it equally quickly acquired the nickname "Pegleg."

A saddleback locomotive was purchased at once and named the A. I. Wilcox. Meanwhile in the summer of 1877, active construction work was started, with Col. A. I. Wilcox as president of the company. The first mile of the road was completed and opened to Tarport, Pa., on Jan. 17, 1878.

Upon leaving Bradford the "Pegleg" followed the Tuna Creek as far as Foster Brook, and then ran alongside that stream the remainder of the way to Gilmore, its terminus. It needed no roadbed, for wooden piles were driven a few feet apart; a stringer was fastened on top of the piles; and the

single rail was then spiked on top.

A cross-arm a few feet down was fastened to the piles on each side. It served as a shelf or track for the two guard rollers, which were attached to the sides of the locomotive and cars.

The little road was now a going proposition. But although it served a long-felt want when it came to handling passengers, it was very lame indeed in the matter of handling freight. The height of the track from the ground made this difficult, costly and slow.

The construction of the road from Tarport went along steadily; and the summer of 1878 saw its completion to Gilmore, a thriving oil town six miles away from Bradford. Business was rushing by this time. The queer little pike was coining money, so a second locomotive of a somewhat different type was purchased and put in operation. It was then that accidents began to happen.

On the morning of August 15, 1878, shortly after leaving Bradford on its third trip, a section of the track collapsed under the train. The two coaches were hurled to the ground, a distance of ten feet, although the locomotive clung to the rail.

About this time, too, a competitor appeared in the field—a three-foot gage line called the Olean, Bradford & Warren (now part of P.R.R.). Not only was it constructed parallel to the "Pegleg," but it also was a much longer road, extending beyond the termini of the monorail. Moreover, since it was a railroad of the regular type, it was much better equipped to handle freight. Consequently it cut into the business of the "Pegleg" to an alarming extent. Still, there was a tremendous amount of drilling going on all over the region, and both roads seemed to prosper for a time.

At that time the "Pegleg" had six stations: Tarport, Foster Brook, Babcock's Mills, Harrisburg Run, Derrick City and Gilmore. Its train made ten round trips daily between Bradford and Gilmore, and although it was patronized by thousands of persons, it was looked upon by the majority of them as a dangerous proposition. The ancient records of this famous line disclose the fact that it was cursed with an accident of some description almost every day, and that the speed maintained on it averaged about twenty miles an hour.

In the fall of 1878 the oil excitement quieted down considerably, due to the bad weather prevailing that year. The "Pegleg" was not patronized nearly as heavily as formerly, and was reported to be losing money.

THEN officials must have conceived the idea that more speed was necessary to make the road pay. Anyway, much to everyone's surprise a new locomotive arrived in Bradford on January 18, 1879. It was then announced that the engine had been built by the Gibbs & Sterret Iron Works of Titusville, Pa., and was to be given a try-out. If it measured up to speed and other qualifications it was to be accepted by the company and put in operation.

Preparations were at once made for the trial trip, probably with the idea in mind to reduce the running time and restore business which the O. B. & W. was now absorbing. The president and directors, it was stated, would be present at the try-out, which would take place January 29, 1879. It looks now as if the officials of the little road were afraid of this new locomotive, for it turned out that with but two exceptions they all were conspicuous

by their absence on January 29. And it was lucky for them that they were.

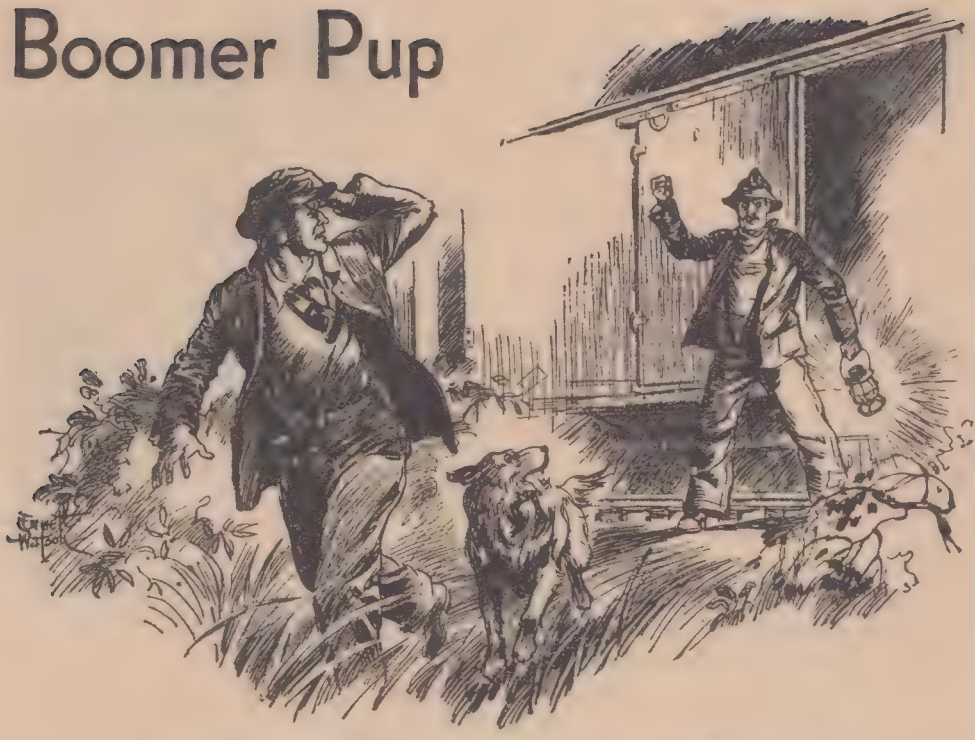
At high noon on the given date the "Gibbs & Sterret," as the engine was called, started on her trial trip—which was also her last trip. Down the Tuna Valley the little engine steamed proudly, amid the shrieks of her whistle and the ringing of her bell. Everything seems to have worked smoothly until she got near Babcock's Mills, when something went wrong. Suddenly she came to a stop. A moment later a deafening explosion resounded throughout the hills and valleys, and the ill-fated engine lay scattered upon the snow-covered ground in a 2,000-foot circle. The assistant superintendent, roadmaster, engineer, fireman, conductor, and brakeman were killed; three workers were seriously injured.

A sad ending for a trial trip! Indeed, it spelled the end for the Bradford & Foster Brook R.R. Company. Persons who up to this time had been rather timid about riding on it were now completely horror-stricken, and its operation was temporarily suspended. The management hoped the public would forget, but it was mistaken.

In the spring of 1879 the road was sold to Messrs. Allen and Skidmore, who announced that during the coming summer it would once more be put into active operation. However, it continued to lay idle until March 10, 1880, when it was seized by the sheriff. At the sale which followed some time later it was bought by a junk dealer who ripped it up. Thus passed out of existence the Bradford & Foster Brook Railroad, better known as the "Pegleg," which probably was the most freakish piece of railroad ever operated in this country.

Photo by Bill Cannon, 100 Amm St., Bradford, Pa.
This Old House, Located at 103 Amm St., Bradford, Pa., Was Originally the Depot of the Pegleg Line. When the Road Was Abandoned It Was Moved to Its Present Location, and a Front and Back Porch Added

Boomer Pup



Rags Had All of His Master's Traits, Including Loyalty to the Iron Pike

By SEARLE B. FAIRES

Former Op, C.P.R. and C.N.R.; Author of "Steve Magill's Past," etc.

THE long freight ground to a stop on Track 5 of Kimberley Yards. The door of the fifth car from the caboose creaked open and Spike Rafferty cautiously poked his head out. It was early spring. Still heavily capped with the winter's snow, the Rockies sent down a wind that chilled.

Spike shivered and turned up his inch-high coat collar, trying to imagine that he didn't feel so cold. His hand fell to the shaggy head of his dog, Rags.

"For a tough pike it sure is quiet," he muttered, peering through the darkness. Except for a switcher puffing fussily at the far end of the yards, the place was silent. "Well, let's go, Rags."

He dropped to the ground, the dog following. And just then two men sprang from the shadows three car lengths away and came for him on the run, their flashlights stabbing the night.

Perhaps it was poor judgment on the part of Spike; perhaps he had an idea of running around the caboose and doubling back; but whatever the case, the result was the same.

He dashed past the four cars and reached the caboose, when suddenly the conductor dropped off the rear step,

lantern in one hand, a bundle of bills in the other. He turned, took the situation in at a glance, and set himself to catch the vagrant.

It was impossible to dodge past the burly figure, and there was no time to duck under a car. Without slackening speed, Spike swerved to the left, then came at the skipper with outstretched arms. His fists caught the conductor in the chest and they went down in a heap, smashing the lantern and sending the papers flying.

Fighting madly, Spike broke away from the cursing conductor, leaped to his feet and sprinted away, the dog bounding along at his heels. He dived recklessly under a box car, rolled clear, ran along a string of empties. Finally he was out of the yards, crouching behind a pile of ties in the right-of-way ditch.

"A helluva beginning on a pike I expect to stick for a job," he mused with a crooked grin. "If they're all as tough as him, what a swell time we're gonna have." He ruffled the dog's hair. "Anyway, that bit o' exercise warmed us up, eh, Rags?"

The dog, a mixture of breeds with collie predominating, thumped the ground with his tail.

Spike heard the dicks crunching through the cinders across the main line from his. Then the footsteps faded and died altogether. He waited to make sure they were gone, got to his feet, stole softly along the right-of-way ditch and reached the terminal building.

Although it was long past midnight, lights still burned in the station beanery. Hugging the shadows, Spike cautiously peered inside. An old man was polishing glasses behind the counter, but otherwise the place was empty. He told himself that it might not be healthy to go inside, with the dicks on the prod. But the pup had to eat.

GLANCING around, he hurried across the platform and entered, Rags tagging along behind. Sliding on to a stool, he grinned at the old man.

"Workin' late, dad?" He used the word unconsciously.

"Dad" Saunders, proprietor of the establishment, nodded with a smile, taking in the boomer's two days' growth of beard and the tattered clothes.

"I allus keep open late, son," he replied, throwing his towel over his shoulder. "The lads comin' in late like to get a cup o' coffee to warm their innards."

"I was wonderin' if I could get a bone for Rags," Spike went on, digging into his pocket and flipping a dime to the counter, "with maybe a piece o' meat on it."

"You bet. Anythin' for you?"

"Nope, I ain't hungry," the boomer lied, trying to keep his eyes away from the baked goods on display.

Dad regarded his pinched face, shrugged and went into the kitchen.

Then he appeared with a bone adorned generously with meat.

"By gosh, that's swell, dad!" Spike commented as he handed it to Rags.

"Forget it. I like dogs myself." Dad wiped his hands on the towel. "Lookin' for a job, maybe?"

The door of the restaurant jerked open and a man strode in, a lantern on his arm.

"I sure am," Spike replied. "Do you think I can—"

He stopped abruptly when he recognized the man. It was the conductor he had just bowled over.

"Cup o' coffee, an' make it snappy,"

the skipper was growling as he climbed on a stool. "Twenty hours a day they work us—" He stopped his raving abruptly, eying the boomer, then slid off his seat and came toward him. "Well, well," he leered, "if it ain't my friend the bum, an' his mutt."

Spike grinned at him. "Hullo, skipper. Workin' you hard?"

"Not as hard as I'm going to work on you!"

"All right, Buscher," Dad intervened, "no rough stuff in here."

"What's eatin' you, anyway?" Spike demanded.

Buscher smiled unpleasantly. "You don't remember, eh? I s'pose you wasn't the guy?"

"You tried to catch me, didn't you?"

"Damn right I did! An' when I get through takin' the price o' my lantern outa your hide you'll know I have."

He made a grab for Spike. Crouching on the floor behind Spike's stool, Rags dropped his bone and rose with a menacing growl.

"Get out, you damn cur!" Buscher's foot lashed out viciously. It was a brutal kick, catching the dog in the midsection and momentarily knocking the wind out of him.

Spike was off his stool in a flash. Already his fists were smashing into the conductor's face. Buscher staggered back under the fury of the onslaught; then, recovering, charged with a roar.

His belly growling for food, his last square meal a dim memory, Spike was like a boy in the big conductor's hands. Anyway, he wouldn't have been a match for Buscher even in perfect physical condition. Fists like hams tore through his guard as if it hadn't been there and hammered his face with stunning force.

Spike went down. And then Rags entered the fight. First he grabbed a cuff of Buscher's overalls and started yanking. The denim gave way with a ripping sound. He leaped in for a fresh hold, and this time got a piece of the conductor's hide. It brought Buscher to his feet with a howl, and he made a dive for the dog. But Rags had let go.

Dad Saunders, who had come around the counter to separate the two men, grabbed the conductor by the scruff of the neck and jerked him back. Dad may have been old, but he was not feeble.

"That'll be enough o' that!" he snapped. "You had no business kickin' the dog. Drink your coffee an' get the hell outa here!"

Buscher shook the hand off roughly, but made no move to continue the fight. Old Dad was well liked on the Iron Mountain Division—his word went a long way with the boys—and the conductor contented himself with glaring at the dog, and then at Spike, who, with face puffed and bleeding, was getting to his feet shakily.

Stepping over to him, Buscher shook a fist under his nose.

"That's just a sample o' what we do to bums on this pike. If you an' the mutt got sense, you'll get out."

With that he grabbed his lantern off the counter and strode out, slamming the door behind him.

EASING himself to a stool, Spike dabbed at his battered face with a handkerchief that had once been white.

Dad pushed a cup of coffee over to him. "Get that into you, son; it'll do you good."

The boomer gulped the scalding liquid gratefully.

"Buscher's not a bad sort, but rough," said Dad, "an' a terror when

it comes to bums. He claims it was bums who killed his son."

Spike put down his cup. "Did they?"

Dad shrugged. "At the inquest they put it down as an accident, but I guess they weren't any too sure. Charlie Buscher was a brakeman, an' one night he disappeared off his train. They found him in the ditch, his neck broken an' a big lump on his head. The coroner said the lump was caused by his hitting a stone when he fell, an' Buscher said he was knocked on the head an' thrown off, but he had no proof, so the case was closed."

Spike shook his head slowly. "Pretty tough on the old man."

Dad nodded. "Yep, he thought a lot of his son."

Spike finished his coffee. "They told me this was a tough pike for boomers. I guess they're right."

"It's nothing to what it used to be. For about two years after Charlie Buscher got killed it was what you might call an open season on bums."

The boomer grinned dubiously. "Sounds like chances for a job are pretty slim."

"Oh, I dunno," said Dad. "Stevens needs men. Mebbe he'll put you on. Tell you what, son; I'll give you a note to him. Mebbe that'll help." The old man scribbled a note and passed it over. "Give that to him."

Spike shoved it into his pocket and slid off the stool. His ears had detected the sound of footsteps coming up the platform.

"Sounds like the dicks comin'," he said, making for the side door. "Well, so long, dad, an' thanks. If I land a job I'll be seein' you."

With Rags close behind, Spike hurried out, and not a moment too soon. The front door swung open and the two dicks strode into the beanery. Spike saw Dad Saunders nonchalantly wiping the counter, shrugging in answer to questions shot at him.

The authority of railroad bulls ceased when they stepped off company property, but Spike was taking no chances, and he didn't stop until he had reached the other side of the town, three short blocks away. He wasn't thinking so much of himself—if he had to put in his thirty days he'd at least be sure of his grub—but he shuddered when he thought of what might happen to the dog, his only real companion for years.

Stopping at the end of the street, he peered through the darkness for a place to hole up. The mountains, silent and forbidding, frowned down at him. As his eyes grew accustomed to the blackness he made out a small building in a field nearby and walked over to it hopefully. It was an abandoned, ramshackle shed.

Entering cautiously, he groped around, and his searching fingers came across a number of sacks. He cleared a corner of rubbish, lay down, and used one sack as a pillow and covered himself with the rest. Rags promptly curled up beside him.

His empty stomach growled and he tightened his belt another notch. "Anyway, Rags," he murmured softly, running his fingers through the dog's shaggy hair, "you got a good bone outa the deal."

And the dog, almost as if he understood, licked his hand, his bushy tail gently thumping the floor.

TRAINMASTER STEVENS looked up from a littered desk and regarded the boomer with a frown.

"I heard you could use a man or two," said Spike.

"You did, eh? What experience you got?"

"Ten years."

"Got anything to show for it?"

"I did have, but I lost 'em."

"Yeah, I know."

"That's the truth."

Stevens grunted, half impressed by Spike's sincerity.

"Maybe. Anyway, you're a boomer, and I'm not hiring any more of that breed."

Spike pulled out Dad's note and handed it to him. He hadn't wanted to use it. It was too much like wire-pulling. But an empty stomach is an empty stomach.

The trainmaster ran through it and tossed it back.

"Dad's a pretty good old fellow," he growled. "But, he might be surprised to know I'm doing the hiring and firing."

"I need a job—and need it bad," Spike pleaded.

"Bah! You're no better than the rest. You'd promise anything to get in a few days' work. Go on, beat it! I've got work to do."

The boomer shrugged hopelessly. "I guess there ain't much use tryin' to explain."

"Not to me. And if you'll take my tip you'll get off this division. We haven't much use for bums up here."

"Okay," said Spike, without much spirit. "Thanks, anyway."

He slowly walked out of the office and went downstairs. Reaching the platform, he glanced up and down, then went into the beanery. Maybe he could wash Dad's dishes for a cup of coffee. Instead of Dad a girl appeared, and he walked out again. Never had he bummed a meal, and he certainly wasn't going to start by tackling the girl.

He surveyed the yards, but there was no train about to depart, and he walked to the west mileboard, left the track and entered a clump of firs and spruce. He came to an ice cold stream. He and the dog drank deeply, and then the two lay down in the shade. It was a hot afternoon—too hot for that time of the year. It was a relief to get out of the sun.

The exhaust of a laboring locomotive brought Spike out of his doze—that and the booming of distant thunder. Climbing to his feet, he hurried to the right-of-way, reaching it just as the engine of a long westbound drag pounded by.

His eyes ran along the train, found an empty with its door open, and as it came closer he called the dog to his side and picked him up. Heaving the dog into the slow moving box car, he scrambled in after him. He took a last look at Kimberley, then went into a corner and sat down; and as he sat there, trying to keep his mind off food, black thunder clouds were gathering over the Rockies. The Mountain Division was in for a storm.

AS darkness came the muttering of thunder grew in volume, crashing and racketing through the mountains. The freight came to a stop, but Spike, dozing fitfully, was only vaguely aware of the fact. His body, stiff and sore, ached for food and proper rest; his mind was in a dreamy semi-stupor. He was back again on his old job in Northern Ontario, wheeling 'em over the muskegs. He sat again in the station beanery in Cochrane, a big steak before him . . .

"Hey, get the hell outa here!"

It was a shout from the open door of the box car, and it brought him back to earth with a start. Getting

slowly to his feet, he recognized the heavy face of Buscher.

"Come on, this is where you unload!" The conductor, only his head visible above the floor of the car, leered up at him.

"Think I didn't see you getting on at Kimberley?" Buscher asked.

Spike walked to the entrance in silence.

"Well, I did, an' I figgered this would be a swell place for you to get off." He clambered into the box car, setting his lantern down. "An' you're goin' to hit the ditch just like my son did," he snarled. "First, the dog."

He aimed a kick at Rags, but Spike beat him to it. The boomer pushed the dog out of the car, receiving the kick himself, then dropped to the ballast. He called to Rags, and the two ducked into the undergrowth beyond the ditch.

"If I catch you on the train again I'll break your neck!" Buscher shouted, jumping to the ground.

"Let's go, Rags," Spike said aloud. "There's steaks ahead."

He climbed back to the right-of-way, watched the markers of the caboose dwindle in the distance, then looked around at his immediate surroundings. The flashes of lightning disclosed a country rough and broken, with no place where he could take shelter.

Tightening his belt another notch, he started plodding westward. Then the storm broke with a fury seldom seen outside of the Rockies. Lightning crackled and hissed. Thunder volleyed and cannonaded. Rain came down in a solid wall, and in a few moments Spike was soaked to the skin. Trotting alongside, Rags shoved his cold muzzle against the boomer's hand as if to be reassured that all was well.

Endless hours passed, and then, swinging around a curve, Spike saw a flag station just ahead. He increased his pace. When he stepped inside a few minutes later he caught a glimpse of a bridge further up the track.

He wrung some of the water out of his clothes, and, groping blindly, made a tour of the one-room station. In a corner he found a lantern used by passengers for flagging trains. Lighting it, he peered around. A "No Smoking" sign stared him in the face. He laughed grimly. He had long since forgotten the taste of tobacco. Another sign informed him that the Continental Limited, No. 2, passed there at three minutes after midnight.

Thrusting his metal matchbox into his pocket, he continued his search, finally coming across an old tarpaulin under one of the benches. He stretched out on the floor and covered himself with it, finding a measure of warmth. After shaking himself a couple of times, Rags curled up at his feet.

And while the boomer shivered under his canvas, listening to the roar of the thunder and the beat of rain against the windows, the dispatchers back in Kimberley sat grim-faced under their green-shaded lights, hanging over their train sheets expectantly. They didn't have to be told what was going on in the mountains.

They knew what a heavy rainstorm in early spring does to the piled-up snows in the mountain passes—and snowfall had been heavy that winter. They knew how quickly tiny rivulents become raging torrents; how quickly placid, slow-moving rivers can grow into roaring, swirling monsters of destruction.

THE rain stopped, giving place to a stiff wind. Chilled until he was blue, Spike got to his feet stiffly, put away canvas and lantern, and con-

tinued his trek westward. Reaching the bridge, one without superstructure, he started across, bent almost double against the blasts of the wind. Just a few feet below was the river, a mass of swirling, hissing water, dotted with débris it had torn up in its mad rush.

He was near the middle of the trembling bridge when it suddenly lurched to the left. He grabbed Rags and dropped on all fours. He realized, now, what had happened. The river had shifted the structure off its base. Any train attempting to pass over it would be sent plunging into the river.

Spike immediately thought of the train. Working his way back, he ran to the station, returning in a few minutes with the lighted lantern. During his absence the bridge had canted to the left under the terrific pressure of the water, and he started across, half crawling, half walking, the lantern in his teeth, fearful lest the bridge be swept away before he could reach the other side.

He didn't know what time it was. His uncertainty urged him to greater speed. The Limited might be due in a few minutes.

Thirty feet from the opposite bank the bridge gave another lurch. Thrown off balance, Spike slid down, grabbing a tie and hanging on grimly. The structure was now partly submerged, and the water sucked at him, threatening to pull him under. He held his head high.

Rags was still on the bridge, crouching and whining.

"Here, Rags," he gasped as he held out the lantern. "Take it."

The dog dook the handle in his teeth. Spike pointed to the bank. "Take it—over there."

Watching him, Spike began working his way from tie to tie. Suddenly he turned his head, just in time to see a huge tree come charging down on him. He heaved his body forward, but a fraction of a second too late. The tree caught his left arm.

Spike cried out in agony and fought the wave of nausea that swept over him. He hung to the slippery tie with his good arm, and as he stared at the bank with tortured eyes, he caught the reflection of a headlight in the sky. The Limited!

Desperately now, he dragged himself forward, his movements punctuated by groans of pain as the water seethed around his broken arm.

FINALLY his feet touched solid ground. Climbing the embankment, he took the lantern from the dog and started up the track at a staggering run, his white face reflecting the pain that racked his body, his eyes fixed on a curve some distance ahead. That was his goal, and he had to reach it to give the train a chance to stop.

A whistle pierced the night. In an effort to increase his stride, Spike stumbled, and as he fell he held the lantern aloft. It struck the dog. For a moment Rags cowered. Then he grabbed the lantern from Spike's hand and started away on the run.

Partly stunned, and clutching his broken arm, Spike clambered to his feet, his eyes on the bobbing light ahead. It disappeared around the curve, and a moment later the Limited came roaring. Spike stumbled out of its way, and it skidded by, brake shoes locked against drivers and showering white-hot sparks, like huge pinwheels. It ground to a stop not ten feet from the bridge.

The engineer and fireman slid to the ground, gazed at the bridge with white faces, then hurried back to find out

who had saved them. They were joined by the conductor and his trainmen.

They came upon the boomer kneeling in the right-of-way ditch just beyond the curve. On the ground before him lay the dog, gasping his last. Honest tears were streaming down Spike's face as he stroked the shaggy, blood-stained head.

The dog's big eyes looked into his master's face and he weakly licked the boomer's hand. The men circled the two quietly. Hard, rough-tongued railroaders of the Rockies, they were silent. Seemingly unconscious of their presence, but holding his own left arm, Spike whispered to his beloved dog. Rags whined once, as if trying to voice his good-by; his tail wagged feebly, then a shudder ran through his body.

Spike's head fell forward. Then he rose slowly and turned to the conductor.

"I'd like to bury him here," he said. "You see, he—it was him that saved your train."

The conductor nodded. Without a word the fireman went back to the engine for his shovel. So they buried the faithful old dog beside the right-of-way; and later the boys on the division chipped in and put up a tablet over the spot.

Spike Rafferty is still on the Iron Mountain Division, and, strangely enough, Buscher, the man who abused him the most, is his best friend. Spike has a pedigreed collie now, and though the man loves him, down in his heart is a spot reserved for another dog, the one who had no pedigree, and was just Rags.

The Sunny Side of the Track

SERVICE WITH A BANG!

"HEY, there," shouted the railroad official, "what do you mean by throwing trunks about like that?"

The porter gasped in astonishment, and several passengers pinched themselves to make sure they weren't dreaming. Then the brass hat again spoke to the porter:

"Don't you see that you're making big dents in the concrete platform?"

* * *

SCOTCH DIALECT

IT was a canny Scot from Dundee en route to the Canadian West, who stood on the platform at North Bay during the hunting season. Seeing a large animal lying there, he approached a native with: "What might you call that?"

"A moose," was the reply.

"A moose! Hoot mon, if that's a moose, what must their rats be like?" And he took the next train back to Montreal.

SPEAKING OF TECHNICAL TERMS—

JOHN T. HENRY, of Rochester, N. Y., clipped this from the "Delaware and Hudson Bulletin":

A young lady recently visited the locomotive works and then later told some of her friends how a locomotive is made.

"You pour a lot of sand into a lot of boxes," she explained, "and you throw old stove lids and things into a furnace, and then you empty the molten stream into a hole in the sand, and everybody yells and swears. Then you pour it out and let it cool and pound it, and then you put it in a thing that bores holes in it. Then you screw it together, and paint it, and put steam in it, and they take it to a drafting-room and make a blue print of it. But one thing I forgot—they have to make a boiler. One man gets inside and one man remains outside, and they pound frightfully; and they tie it to the other thing, and you ought to see it go!"

SAYS THE TRAVELING MAN

SHE was "Mazie" in New Haven,
She was "Bess" in San Antone,
She was "Fanny" up in Portland,
In Akron she was "Leone."
She was "Gladys" in St. Louis,
She was "Flo" in Eau Claire,
But in my expense account, you bet
She was "Meals and Railroad Fare."
—Central of Georgia Magazine.

* * *

THE STATION AGENT'S REPLY

I ONCE read a letter which a Southern Pacific station agent in Nevada had received from the general office at San Francisco. It ended with these words:

"For such work as this NO excuse can be accepted. What excuse have you to offer?"

It was interesting to see how this was answered. The agent showed me his reply. I read it through hurriedly. Apparently it read all right but I couldn't get any meaning from the letter. So I read it again. Still very ambiguous. I read it the third time, very carefully. All this time the agent was watching me, not saying a word. Finally I handed it back to him and said:

"Well, Percy, I don't like to criticize a man's letters, but I'll be damned if I can get any sense out of this one."

"Fine!" he exclaimed. "That's just what I wanted. If you can't make sense out of it, neither can those birds in the general office; only they won't admit it, and that will close the correspondence."

And it did.—W. F. Knapke.

* * *

A TEST.

"WHAT would you do?" asked the fireman black
Of the grimy engineer,
"If suddenly upon the track
A woman should appear?
And suppose you were running a little behind,
With your gage chock up to 'L,'
And the woman was deaf and dumb and blind,
And couldn't hear whistle or bell!"

"Do?" cried the grimy engineer,
With a look of cold disdain;
"I'd get out there and leave you here
To take your chance with the train!
I'd straighten out that pilot plate,
And that woman I would snatch,
Before she knew whether we were freight,
Express, wild, or despatch!"

"That," said the fireman, "I call game!"
And he shoveled in the coal,
And wondered if he'd do the same,
In a similar kind of a hole.
And the headlight cast a long, thin stream
Through the night of dismal black,
When suddenly there came the scream
Of a woman on the track!

"Jump!" shrieked the fireman. "There she goes!"
But the engineer sat still,
And a woman's sorrows, joys, and woes
Were taken like a pill.
"Why didn't you go out on the pilot plate?
That was the place for you!
Why didn't you try to avert her fate,
As you boasted you would do?"

"My friend," said the grimy engineer,
With apologetic cough,
"That woman knew but trouble here,
And now she's better off.
Besides, by grinding her to hash,
A good fat thing I draw—
The road will pay five thousand cash,
And she was—my mother-in-law!"
—Anonymous (sent in by F. J. Gantzler, Crestline, O.)

* * *

SOUNDS LIKE A WHISTLE

"IS it true that the train schedules have been changed quite a bit?" a lady asked the Georgia Central ticket agent.

"Yes, madam," he answered.

"How about the 11.45 train?"

"That has been changed to 11.50, madam."

"And the 1.15?"

"It now leaves at 1.23."

"How about that train that used to leave just before two o'clock?"

"Yes, they have changed the two to two too to two-two."

* * *

THE NIGHT EXPRESS

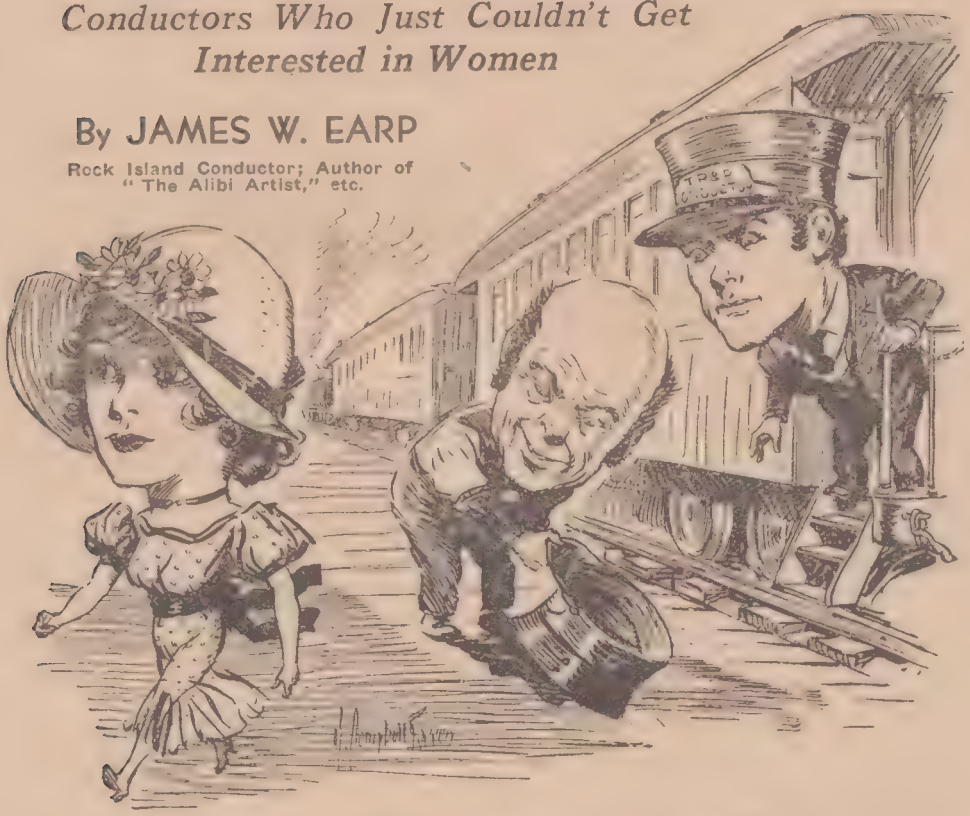
A RUMBLE in the distance,
First slow, then louder grown;
A thousand constellations
Through twilight upward thrown;
The hiss of steam escaping,
A clot of dingy smoke,
A blur of flashing windows
And eyes of peering folk;
The crash of wheels on switches,
The lurch of onward train,
A blast diminuendo—
The village sleeps again.
—H. S. Haskins

Not on the Time Card

Dennis Was One of Those Grouchy Conductors Who Just Couldn't Get Interested in Women

By JAMES W. EARP

Rock Island Conductor; Author of "The Alibi Artist," etc.



WINDY SMITH sat humped on the long bench in the switch shanty. His eyes were gloomy, his corncob pipe cold and neglected—a sure sign the old radical switch engine foreman was plumbing the depths of despair. As Dustpan Kelly and Humpy Cain entered, Windy was saying in mournful tones to Know-it-all Bonner:

"It wouldn't be so bad if she was an American girl. But to have my only son marry the daughter of a Bohemian lamp tender just about breaks my heart."

"He might do a lot worse," said the sage of the switch shanty. "Mary is a nice girl, a good worker and pretty. If I were you I'd forget about it and make the best of things."

"I can't!" Windy groaned. "I hate foreigners. Easy for you to talk. Your son ain't marrying an alien."

"He probably will, if ever he does marry," Know-it-all grinned. "Most of us do in America. You make me think of Denny Murphy, except that alongside him you're a piker when it comes to hating. The difference is that

Denny had no sons at the time. Did I ever tell you the story?"

"There you go!" Windy growled. "Here I come looking for help and sympathy and you want to tell me a funny story. A hell of a friend you are! Tell the story to that guy Patuchek. He might appreciate another laugh."

"Pete isn't laughing," Know-it-all said. "He is as much against this marriage as you are. High-class Bohemians like Pete have their pride, you know. They don't like their children to marry beneath them."

Windy glared for a moment, then got to his feet. A slam of the door and he was gone. Humpy Cain broke the silence which followed.

"Windy sure is taking it hard. Wonder what he intends to do about it?"

Know-it-all sighed. "Something foolish, no doubt. His kind always do. Too bad he didn't know Denny Murphy and his story. Denny was like Windy, stubborn as a mule and foolish up to the last moment."

"Then what?" from Dustpan.

"That," said Know-it-all, "is the story. We got thirty minutes to spare. I can tell it in twenty. Sit down."

DENNIS MURPHY carried two big hates in his heart. One was for women, the other for foreigners. A childhood spent in an orphans' home was the reason for the first. Three Italian gandy dancers who cost Denny his first job as a conductor brought on the second. That was after a stern and unfeeling super had fired Denny for tossing the tie-tamping trio in a more or less scrambled heap on the B. R. N.'s right-of-way as a wind-up to a fight which left Denny's caboose looking like a cyclone had passed through it.

"Just because they refused to give up their passes was no reason for your actions, Murphy," the super told him. "Probably they didn't grasp what you wanted. They don't know English. But I'll have you understand that we class them as employees. You're fired for fighting with employees."

So the red-headed giant came to the T. R. & P. and hired out as a percentage man. By an irony of Fate he drew the Abilene local which plied its way through a territory teeming with aliens. Once upon a time Denny had thought of foreigners only in terms of gandy dancing Italians. Two trips on the local and he stretched his idea to include Poles and Bohemians, as well as the Italians who had come to work the coal fields in and about Mendon, Abilene and Whiting.

His hatreds did not lessen with the passing of the first year on the local. Then Bernadette Sabrowsky, a Russian girl, began to ride with him. From Abilene to Mendon on the morning local, and vice versa on the evening local. Every time Denny saw her he would scowl.

"That Russian female again!" he would swear under his breath. "Why the devil can't she ride with someone else?"

The answer was, there was no one else with whom she could ride. But Denny never thought of that. All he knew was that she was a woman and a foreign one; and that he hated both kinds, so much so that he even made Pete Foley, his rear brakeman, take up the girl's ticket. Denny wasn't going to disgrace himself by taking it himself.

Then came a day when things went wrong. Maybe the gods decided it was time to punish Denny for his prejudice. That was the day the girl

got on at Mendon to go to Abilene. As they left town Denny motioned to his brakeman.

"That Russian is on again. Get her ticket."

"A darned good-looking one, if you ask me," Pete grinned. "I mean the girl."

He entered the compartment reserved for passengers. A moment later he came back, a puzzled look on his face. Denny held out his hand for the ticket.

"Sorry, boss," said Pete uneasily. "But she's lost her ticket. She says—"

"Never mind what she says!" Denny cut in. "Take my cash fare receipts and cut her a slip. And don't forget to tack on the excess, either. We'll teach her to buy a ticket next time before she gets on this train."

Pete looked away. "The fact is, boss, she says she hasn't any money. Lost her pocketbook as well as her ticket. Says she'll pay you tomorrow."

"She'll pay now or unload!" Denny retorted angrily. "We don't run any credit books on this hack. Go tell her to dig up. If she don't you put her off."

"Not me, boss," Pete refused. "I'm not putting any women off any train. I'd pay their fare first."

"Suits me," Denny nodded. "Donate."

BUT Pete isn't donating. To show his independence he climbs into the cupola. Denny glares at him for just a moment then goes in to make good his boasts. The girl looks up and smiles at him, but no smile from Denny. His blue eyes are looking over her head, not seeing the ragged hat on top the wavy brown hair, nor the brown eyes, nor the clear pallor of her skin.

"Ticket, please," said Denny in his grandest manner.

"It is lost," the girl answered in a voice like music. "Also my pocketbook with all my money—fifty cents. You let me ride, and tomorrow I will pay you when I go back to Mendon to work."

"Sorry!" Denny snapped. "You'll have to pay me now or get off."

"But I do not want to get off," said the girl. "All day have I worked hard. I am too tired to walk. It is far to Abilene. Please, sir, you would not make me walk. I would not make you walk if you was tired."

A hand came up to touch his sleeve —a hand that was red and rough from too much exposure to soap and water and unfriendly suns and winds.

Denny saw the hand and stared as if he were seeing a ghost. Once upon a time his hands had been like that when in the orphanage. Sometimes they cracked and bled. Those were the times the granite-faced spinsters delighted to hit them with rulers or switches. Denny had never forgotten those days, could never forgive those women.

"You will please to let me ride?" the girl went on. "I will pay you tomorrow."

Denny twirled his ticket punch aimlessly. He knew he could not put this girl off the train. Not one with those hands. Girls with hands like hers always paid.

Somehow, Denny had never thought of a woman having hands like his had once been. He wondered if they hurt. His own had in those days which were now so much like a nightmare. Cold cream would cure them. She probably had never heard of cold cream.

Turning on his heel he went back to his desk, there to brazenly cut a cash

fare while Pete Foley looked on. Pete must never know what a fool his conductor had been, still was. He watched her get off at Abilene and looked away when she tried to thank him. Old Patrick Donovan, the station agent, tipped his hat as she passed.

"Who is she?" Denny asked.

"Bernadette Sabrowsky," Pat replied. "A pretty colleen, isn't she, lad? 'Tis time you were noticing the ladies. A man would never make a mistake in marrying her."

"Nobody said anything about marriage, you old fool!" Denny grumbled. "You know women don't have any place on my time card."

"Neither do extra trains on a railroad," Pat grinned. "Yet they run just the same."

At which Denny scowled again. But he did not contradict Pat.

BERNADETTE was waiting for him the next morning at Abilene. Foley must have been surprised when Denny did not ask him to take up the girl's ticket. But Denny was not surprised when the girl handed him a ticket and the money due him.

"I am much obliged," she told him. "You are very nice." A shrug of her slim shoulders. "But then, all American men are nice."

Denny gave a grunt. "What do you do that makes you go to Mendon so much?"

"Wash and scrub for the American ladies so they will not ruin their pretty white hands." She laughed softly and held her own up to view. "Mine do not matter. Russian hands are made to work. Your wife—her hands are not like this."

"I haven't any wife," said Denny as he looked at her hands. If anything, they were rougher and redder than the day before. "And you ought to take care of your paws. No reason for them to be like that."

"They must be," the girl replied. "The water at Mendon is very bad. It takes much lye to make it so the clothes will be clean. But you would not know that. You have never washed clothes."

"I've washed more clothes than you ever saw," Denny responded. "And my hands were worse than yours are. Many a night I could hardly sleep because they hurt so."

"Mine hurt, too," she admitted. "But why did you wash clothes?"

Denny told her. He never could explain just why he did. Maybe it was because she seemed interested in him. No other woman ever had. Denny almost forgot that she was of the tribe he hated. The train was slowing down for Mendon when he finished. Going to his grip, he took his only bottle of shaving lotion and handed it to her.

"Use this at night," he ordered. "It'll cure them and make them soft and white. I've got no use for it, anyway. Had meant to throw it away. Glad I didn't now."

Of course, he lied. But the lie did the trick. The girl took the lotion. From then on Denny grew interested. At first the improvement in her hands was barely noticeable, but there was no doubt about an improvement. In a week the hands were cured of their worst roughness. After that it was a mere matter of time.

A drummer gave the conductor a jar of cold cream. That he passed on to her.

"You are very nice," she told him. "Some day, maybe, I do something for you."

He laughed at this. As if she could

ever do anything for him. Little by little he learned about her family and herself. Her father worked in the mines. Her mother took in washing, at which the younger sister helped. All saved their money that Mr. Sabrowsky might eventually realize his life's ambition and have a bakery shop of his own.

"But the money comes in slow," she sighed one day. "I shall be an old woman before there is enough. Always it is something. Sometimes sickness. Another time, death. But some day we will have it, and father will be happy. Also me."

"And then what?" Denny inquired.

SHE gestured. "Who knows? Maybe I get married. Long ago I would have married as my other sisters did, only I wished to stay to work that father might quit the mines and be happy. Now I am old, and no one would marry me but Ivan."

"Old?" Denny repeated scornfully. "Don't be silly, Bernadette. You're young."

"Twenty-two," she said. "That is old for our young men. They like women young. So does Ivan. That is why he would marry me. I am younger than he."

Denny frowned. "You love this Ivan?"

She shook her head. "No, Denny." She called the conductor by his first name now. "I could never love Ivan. He beats his horses when he is angry with them. Maybe he would beat me too. But after all he would be better than no husband at all. I could have a home and children—lots of children. I love children."

"Better forget Ivan," Denny recommended. He was peeved at the idea of anyone beating Bernadette. "You can do better than that. You're young and pretty. Some day a nice young man will come along and want to marry you and you'll be glad you didn't get hooked up with Ivan."

"You think I am pretty, Denny?"

"I do," he answered without thinking.

"Yet you would not want to marry me?"

Denny was stunned. The girl was looking at him with big brown eyes as she put the question. She wasn't just p r e t t y as she sat there. She was beautiful. Denny had to admit it as he caught his breath and tried to find words. He didn't want to hurt her by telling her the truth. After all, she was not to blame for being a foreigner.

"It isn't just you, Bernadette," Denny finally managed to say. "I don't want to marry anybody."

"You say it nice," she said gently, "but still you say no. So now I know if ever I marry I must marry Ivan."

The engineer was whistling for Abilene as she spoke. A lonely little whistle it seemed to Denny. Bernadette stood up. Her lips were smiling, but the brown eyes were sad. Denny felt like taking her in his arms and petting her. Had she been one of his own race he might have done so.

While he was wondering what to do, a weak air hose blew up. The jar that hurled Denny against the partition also threw her into his arms.

It was less than a minute all told that Denny Murphy held this Russian girl in his arms where no other woman had ever been held before. But in that minute Denny Murphy lived a lifetime. The nearness of the slim feminine body to his and the touch of her soft cheek against his brought something to Denny's heart that had never been there before.

The jarring of the caboose as it stopped almost opposite the station broke the spell. Denny drew away rudely, abruptly.

"An air hose blowed up," said Denny with shaking voice. "You're —you're not hurt?"

"No, Denny." Her smile was one of tenderness. "Thanks to you. You are very strong, Denny. It is good for men to be strong. Ivan is strong, too. Maybe I could learn to love him if he would not beat me."

She got off the train, as always, by herself. Old Patrick Donovan shook his head as Denny followed soon after.

"In my youth the Irish were noted for their gallantry," he said reproachfully. "We would have helped a lady from the train, even if she were not as pretty as yon colleen. You are as lacking in manners as in common sense and good eyesight. Serves you right if you die a bachelor."

"I expect to," Denny retorted peevishly.

THE next day was Sunday. Once upon a time Sundays were rest days for Denny. This one was an exception. To save his life he could not get Bernadette out of his mind He knew he had hurt her, and she was too nice a girl to be hurt. When he saw her again he would apologize and explain just what he had meant. At any rate he must make her promise not to marry Ivan.

But he was not to see Bernadette Monday morning. For once she was not waiting on the platform at Abilene. He missed her shy smile of greeting. When time came to leave and no Bernadette appeared he turned to Patrick.

"No passengers this morning?"

"No passengers," Pat repeated.

Denny highballed with mixed feelings. He hoped Bernadette was not sick. But something was wrong else she would have been there to go to Mendon with him. Perhaps she had quit going to Mendon. Denny squirmed at the thought. Maybe, after all, she had decided to marry Ivan.

The thought of Ivan kept Denny perturbed all that day. Not that he cared who the girl married, just so it was not Ivan. Tomorrow he must ask Pat about her. He did, but got no satisfaction. All of a sudden Pat Donovan had developed a grouch.

"I know nothing about your girls," the old agent declared sourly. "Sure 'tis all I can do to mind me own business. If you've lost her that's your hard luck. You had your chance to get a fine girl."

"Don't be a fool!" Denny exclaimed angrily. "I'm just asking for information. She's not sick, is she?"

"If she is, then I've been dead for fifty years," Pat replied. "I saw her last night. Her father is starting up a bakery shop of his own. She was helping him." Denny stifled a start. Now, he knew the worst. Bernadette was going to marry Ivan. That woman-beater, no doubt, had furnished the money to set old man Sabrowsky up in business. And Bernadette had sold herself.

More than ever Denny knew he must see Bernadette. No matter what happened, she must not marry Ivan. If it came to a showdown he himself would lend Sabrowsky the money to start the bakery. Anything to block that marriage.

Without a word of explanation to anyone Denny left the station to stroll up Abilene's one main street. He found the location for Sabrowsky's new bakery, but no sign of Bernadette. The

local freight was twenty minutes late when Denny finally returned to pass to the anxious engineer the highball. At Marland there was a message from the dispatcher for him which read:

Why the twenty minutes delay today at Abilene?

To which Denny sent the following laconic reply:

Looking for lost merchandise.

And Denny felt in his heart it was lost merchandise. Most people never know how precious a thing is until they've lost it for good. Denny was no exception. A dozen times in the weeks that followed he strolled uptown, always hoping to see Bernadette and always disappointed. Once he did meet her father and was surprised to find him a very likable fellow. But he could not bring himself to ask about Bernadette. He did not need to. The next day Patrick broke the news to Denny.

"I suppose you'll be coming down to the wedding tonight, lad? Bernadette told me all about it last night. She asked me to say that you would be welcome if you wanted to come. And don't forget, you're supposed to bring a present."

"So she is getting married!" Denny swallowed hard. "I was hoping she wouldn't. She's too nice a person to marry that brute. Tell me, Pat, how does she look?"

Pat glanced away. "Sure, she looks a little sad, if I am to judge. But then, women always look sad at a wedding. It's their nature."

Denny nodded miserably. And Bernadette would be sad all the rest of her life. It was a shame! Worse than that, it was a crime. She needed some one strong to protect and love her, not a cart driver like Ivan to abuse her.

His mouth set in a grim smile. Well, Ivan was *not* going to marry her. Tonight would see him at the wedding party, which was not going to be a wedding party if he could prevent it. He had the money to lend Sabrowsky. And the only present he would take would be a bunch of knuckles for Ivan's nose.

The conductor told Foley his plans on leaving Abilene. Foley shook his head.

"Better lay off these Russians," Foley advised. "They don't like us Americans any too well as it is. Liable to get a knife stuck in your ribs. What do you care who the girl marries? You don't love her."

Denny hung his head. Whatever else he was, Dennis Murphy was no fool. When he lifted his head and replied Foley got the shock of a lifetime.

"The trouble is, Pete, I'm afraid I do. I can't explain it at all. Not so you would understand."

"Maybe she wouldn't want to marry you?" Foley protested.

"I think she would," said Denny. "She wants to be mated and have a home and children. I can give her that. And I'd be good to her. Anyway, I'm going down tonight. She's not going to tie up with this Ivan, if I have to beat him up and all his family and her own as well."

"In that case," Foley chuckled, "I guess I'll have to go along. It has been a long time since I had a good fight."

IT was only six miles to Abilene from Marland, the little subdivision of the T. R. & P. Nowadays an auto can make it in eight or ten

minutes. But autos were few and far between in those days. Denny and Foley had to depend on a team of horses rented from a local livery stable.

The horses were in a lather as they raced down Abilene's one main street. It took but a question at Abilene Ike's thirst emporium to find out where the Sabrowskys were located. Lights were blazing through the little home when Denny drove up like a madman. Inside was a crowd of people dressed in their Sunday best. Beyond them came the sound of organ music.

"Looks to me like we're just in time," mused Foley. "Let's hope so."

Denny did not answer. Tossing the reins to Foley he leaped from the seat and dashed up the board walk as fast as he could run.

The doors were wide open. Noisy as Denny's entrance was, the crowd barely noticed. Their eyes were on the two couples standing before a man garbed like a Russian priest, who already was speaking in a low singsong.

It was then that Denny saw Bernadette. A sad-eyed, tearful Bernadette, dressed in the costume of her parents' native land—a more beautiful Bernadette than Denny had ever dreamed of.

In that instant Denny Murphy shed all his prejudice even as a duck sheds water from her back. He lunged through the crowd like a football player, unheeding the commotion and excitement which he raised as he pushed men and women to the right and left. At last he reached her.

"Denny," she said. "You came!"

"I did," Denny responded, his eyes on the man whose thick lips and beetling eyebrows proclaimed him the much despised Ivan. "I came to say that you don't have to marry this fellow. I've got money. I'll lend your father what he needs to start his shop."

Voices lifted themselves in a clamor behind Denny. Angry voices, if Denny could judge from their tenor. A sudden surging forward from the rear brought a warning shout from Foley, who had followed Denny in and was now just back of him. Now Mr. Sabrowsky was coming forward.

"Who is this crazy man?" he demanded of Bernadette in English as good as Denny's. "Does he not know this is a wedding? Tell him to leave."

Denny ignored Old Man Sabrowsky. He was looking into Bernadette's brown eyes. That look decided him. He jerked his head towards the beetle-browed Ivan.

"You want to marry this man?" he asked. "Do you?"

"No, Denny." Her eyes were shining. "I never wanted to marry him."

"Would you marry me?"

"Yes, Denny."

Somewhere close to Denny a woman shrieked. In a wink the place was in and uproar.

Denny waited for no more. One jump and Bernadette was in his arms. The beetle-browed Ivan reached for Denny and went down as a hard fist crashed into his face. With Foley bringing up the rear, Denny fought his way out of the little home, lifted Bernadette to the seat of the buggy and mounted beside her. They went tearing down the street with Foley hanging on the side step and the crowd shouting curses and maledictions upon them.

Not until they had left the hue and cry far behind them did Denny rein in his team. At his side Bernadette's slim form was shaking with sobs. Denny folded her in his arms.

"Don't cry, honey," he begged. "I'll be good to you."

She lifted her face to his. "I am

not crying, Denny. I am laughing. You were so funny."

"Funny?" Denny said. "What do you mean?"

"The wedding," she giggled. "It was not my wedding. It was my sister. And you hit Ivan. He will never forgive you."

"Oh!" was all Denny could say. "But I thought—Pat said—"

"I know." She snuggled close to him. "He said he would make you think I was to be wed. And if you really loved me you would come down and steal me, because all Irishmen were like that when they loved. And you do love me, don't you, Denny?"

And Conductor Dennis Murphy said as he kissed her: "I'm afraid I do."

A MONTH BEHIND SCHEDULE

IN the early days, when the network of railways in Southwest Africa was under construction, the engineers were forced to follow the river beds. This step had no serious consequences at first, for during the greater part of the year the rivers were completely dry and the rains so uncertain and infrequent that the river was no more than a trickle. During the winter months, however, there have been storms, floods and cloudbursts such as have never been heard of before, and Southwest Africa has been isolated from its neighbors in the Union of South Africa. On January 1st, 1934, a trainload of passengers left Cape Town bound for the Southwest, due at Windhoek on January 4th. In it there were mothers and children returning home after the Christmas holidays, school teachers, typists and business men.

All went well as far as De Aar, the junction between the Union and Southwest Africa. There they first heard of the heavy rains which were causing such alarm in their home towns. At Keetmanshoop, a little village in desert country, came the news that the line further north had been washed away and that the journey could not be continued until it had been repaired. At first it seemed that the delay would be no more than a few hours, or a day at the most.

But a few days passed. Despite the fact they were stranded in a barren, waterlogged country, the passengers still regarded their misfortune in the light of an adventure, but by the end of a week they were in quite different spirits.

Each day attempts were made to repair the damaged lines and bridges, and each night storms and heavy rains swept away the work which had just been completed. Between Mariental and Windhoek the river crosses the railway fourteen times, and the line was washed away in fourteen places. Telegraph wires were broken down throughout the country. The roads looked like rivers. Airplanes and wireless provided the only means of communication, but the continuous storms and flooded land rendered even flying difficult.

The train's staff went about their work cheerfully, and with a more or less regular supply of food coming up from the south they were able to prepare appetizing meals for the weary travelers. In fact, the dining saloon (car) was the one bright spot on the train. With the help of a little South African wine conversation flowed quite easily.

The mothers were in the saddest plight. The clothes with which the children left Cape Town were quite inadequate for a long stay. With a limited supply of water and no facilities for washing or ironing, cleanliness was quite beyond their reach. Always there was talk of the line being repaired soon, but the rain showed no sign of abating and the passengers became weighed down with despair. Then, one day a month after the start of the journey, airplanes came to the rescue. At the expense of the railway administration the passengers, one after another, were transported to their homes up north. The rains still continued. Even three months later there was no through rail communication between Southwest Africa and the Union.—Thelma Woodward, Room 34, Road Motor Service Section, S. A. R. Headquarters, Johannesburg, So. Africa.

The "Cornfield Meet" at Silver Creek

By H. R. EDWARDS

Old Print from A. S. Pennoyer, N. Y. Chapter, Rv. & Loco. Historical Society

TEN miles west of Angola, N. Y., and ninety miles east of Ashtabula, Ohio—scenes of two frightful wrecks described in recent numbers of RAILROAD STORIES—an eastbound excursion train heading for Niagara Falls ploughed head-on into a heavy westbound local freight near the village of Silver Creek, N. Y., on Tuesday, September 14, 1886.

This is said to have been the most

FAMOUS OLD-TIME RAILROAD DISASTERS

disastrous pile-up in the history of the Nickel Plate Road (the New York, Chicago & St. Louis).

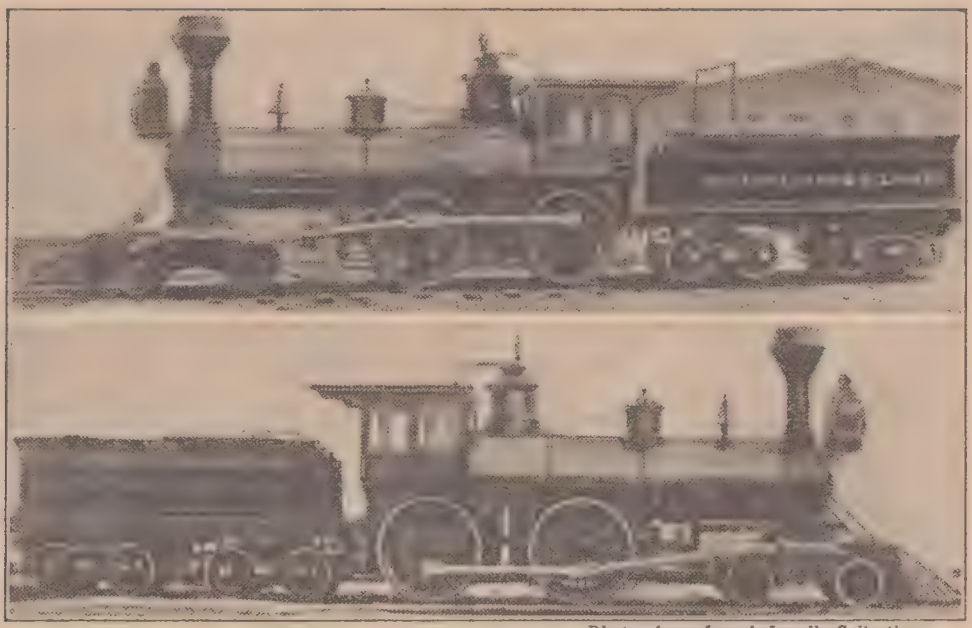
The excursion left Erie, Pa., at 8.00 A.M. with eleven coaches and 400 passengers aboard—a number which was increased at various stops along the road. She was loaded to capacity, with more than 40 people in each car.

At Silver Creek, thirty miles from Buffalo, Engineer Lewis Brewer received orders to run ahead regardless of the local freight, No. 6, which was ordered to wait on a siding below the station.

He had proceeded as far as the sharp curve one-half mile from the depot—at a speed which trainmen swore later was only about eight miles an hour—when he saw smoke floating over the hilltops around the curve. He knew right away what that meant.

Lewis sounded warning whistles—*but too late!* No. 6, stepping along at thirty miles an hour to make Silver Creek siding, ran head-on into the passenger. Just before they met in fatal embrace—known as a "cornfield meet"—both engine crews leaped to safety.

Pilot against pilot the locomotives struck, smashed by the terrific shock



Photos from Joseph Lavelle Collection

Two Graceful Nickel Plate Eight-Wheelers of the Type Which Crashed Head-on at Silver Creek in 1886. No. 1 (above) and No. 153 (below), Both Built by the Brooks Works, at Dunkirk, N. Y.

into a mass of steel junk. Flues of one boiler were jammed into flues of the other. The tender on the freight was hurled from the rails and turned bottom side up on the adjoining track.

In keeping with practices of a half-century ago, the excursion train was made up of unevenly matched cars, the baggage-car coupler being higher than that of the smoker immediately behind it. For that reason, the sudden impact lifted the baggage car above the tracks and drove it backward into the smoker, completely telescoping the latter.

Starting in the forward end of the smoker, the baggage car mowed down the seats and crushed their occupants into unrecognizable masses on the floor. Trucks of the tender and of two following cars were thrown together so closely that they stood on the tracks with wheels touching.

Passengers in the rear coaches were unhurt, only shaken up. Immediately they swarmed around the wreck. At first they were too dazed to do anything but stand by and argue how it had happened. Then Henry Shaefer, the Nickel Plate trainmaster at Conneaut, Ohio, who had been riding the excursion, organized relief work.

Within ten minutes some five hundred or more persons had gathered, including natives of Silver Creek, with axes and other tools. Not until they began to chop away the crushed sides of the smoking car was the full extent of the disaster known.

Bruised and mangled bodies were found doubled up in grotesque positions, many pinioned in the wreckage. Some of the living had been hurled violently into the embrace of the dead.

Of thirty-five occupants of the smoker, only two escaped with slight injuries. Nineteen were killed outright and the others seriously wounded.

The Nickel Plate and the Lake Shore roads each sent a special train loaded with surgeons, nurses and medi-

cal supplies, from Buffalo and Erie respectively, which lost no time in getting to the scene of the disaster.

In the investigation that followed, William Harris, the freight engineer, produced written orders which cleared him of blame. But Lewis Brewer, engineer of the excursion train, had no such alibi. He lost his nerve and disappeared as soon as he saw what had happened, without waiting to be called on the carpet.

A few days after the wreck Brewer sent one of the Buffalo daily papers an undated letter written in his own hand. This letter was published. The engineer explained that he had received orders to pass the freight at Silver Creek, but as there was no sidetrack in this village and as he had never before been instructed to meet a train there, he proceeded "cautiously" on his way at eight miles an hour—which was all that any man could do! He denied responsibility for the accident.

Persistent rumors for a long time afterward said Lewis Brewer had hit the boomer trail and was running engines "under a flag" (under an assumed name) on Midwestern roads. He was never again seen in the vicinity of Silver Creek.

(Next Month—The Million-Dollar Wreck of the Century, in 1905)

WHEN BARNUM RODE THE CABOOSE

WHEN P. T. Barnum, the great showman, was lecturing throughout the country on "The Art of Making Money," he reached Toledo, O., one afternoon more than an hour late to make connections for Fort Wayne, Ind., where he was to lecture that night at eight. He called on Superintendent Andrews of the Toledo, Wabash & Western (now Wabash) who told him there were no trains until the next morning. Barnum asked him if he could hire a locomotive and car.

"Impossible," said Andrews. "It is 94 miles, and a special is out of the question. Freight trains occupy every bit of our track. We don't run extras unless there is something mighty important."

Barnum was desperate. Every one of his nights was engaged for the next two months. He drew out his wallet and offered $200 to get to Fort Wayne before eight.

"I am Barnum, the museum man. It is important. I must appear at the appointed time or disappoint my audience."

The official reconsidered. He said:

"If you can ride the caboose, your reputation for punctuality won't suffer on account of the T. W. & W. We'll run a couple of cars and a caboose as an extra. You've got a ticket which entitles you to ride to Fort Wayne. Hand your ticket to the freight agent there on your arrival and he will accept it for your transportation."

Crews of freight trains that had taken the siding to let them pass gazed in astonishment at the unusual spectacle and wondered what it was all about. Barnum raised his hat to them as he passed, for he never neglected an opportunity to advertise himself under any circumstances. At one of the stations he received a telegram from Andrews asking how he liked riding in the caboose.

"Am as happy as a clam at high water. Am being carried in a style never surpassed by Cæsar's triumphal march into Rome. The springs of the caboose are as downy as a feather bed. Hurrah for the Toledo, Wabash & Western!"

For 20 miles the engineer permitted him to ride the engine. It made his head swim and he crawled back to the little red caboose. A newspaper the next day published his ride as "A Journey In a Caboose." He got bundles of the papers, marked them and sent copies to towns and cities where he was to lecture.

Thus did Barnum, the greatest horn-blower of all time, cash in on his ride in a caboose. Everything he did he turned into free advertising. This was no exception.—

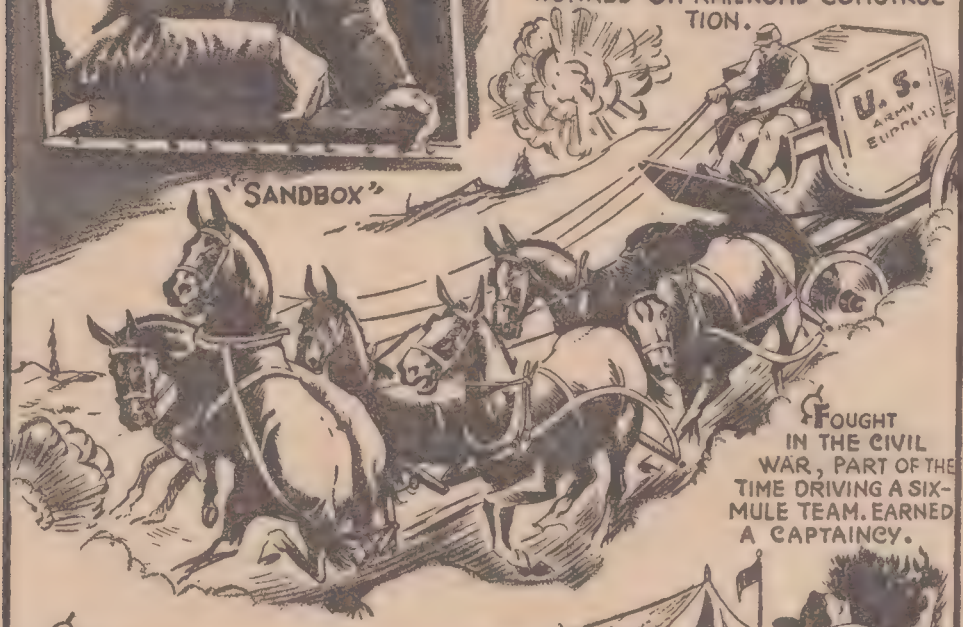
Frank A. Hilker.

Famous ENGINEERS

by Stookie Allen

CAPT. PATRICK FLANNERY

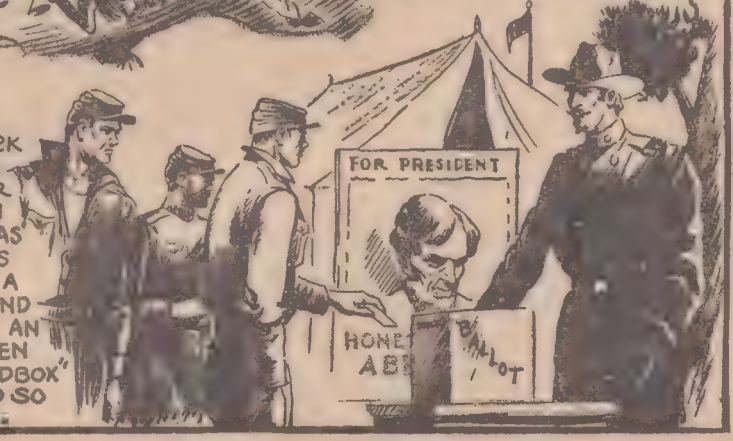
BORN IN IRELAND ON ST. PATRICK'S DAY, 1844. FAMILY MOVED TO MONTREAL, CANADA, IN 1845. FATHER WAS A BOOMER CONSTRUCTION WORKER, BEGINNING ON THE GRAND TRUNK AND DRIFTING SOUTHWARD. AS A LAD PATRICK WORKED ON RAILROAD CONSTRUCTION.

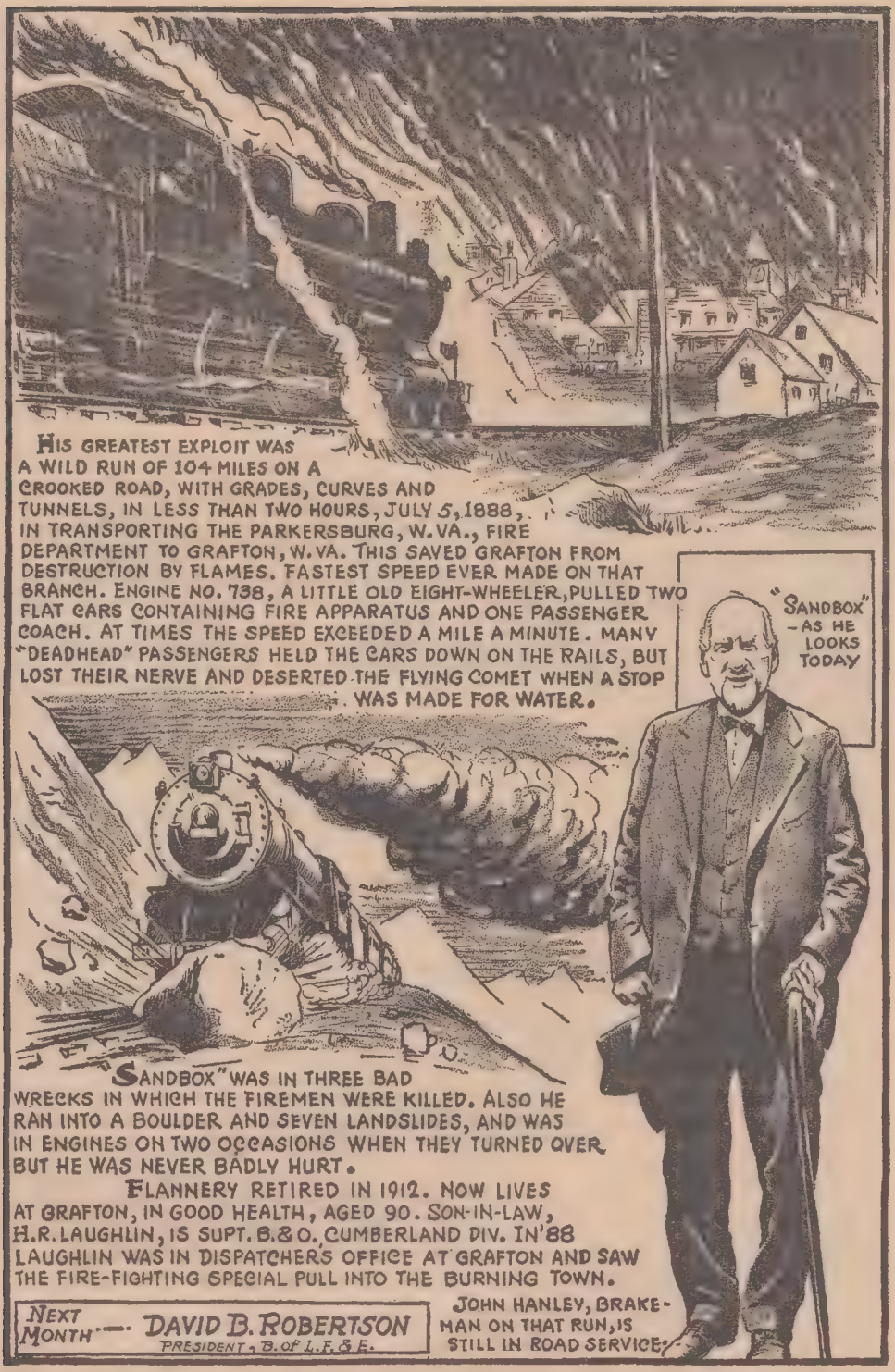


"SANDBOX"

FOUGHT IN THE CIVIL WAR, PART OF THE TIME DRIVING A SIX-MULE TEAM. EARNED A CAPTAINCY.

EVEN BEFORE HE WAS VOTING AGE, PATRICK VOTED FOR LINCOLN AS DID MANY OTHER BOYS IN THE UNION ARMY. IN 1865, AS SOON AS WAR WAS OVER, HE BECAME A B.&O. FIREMAN AND TWO YEARS LATER AN ENGINEER. THE MEN DUBBED HIM "SANDBOX" BECAUSE HE USED SO MUCH SAND.





HIS GREATEST EXPLOIT WAS A WILD RUN OF 104 MILES ON A CROOKED ROAD, WITH GRADES, CURVES AND TUNNELS, IN LESS THAN TWO HOURS, JULY 5, 1888, IN TRANSPORTING THE PARKERSBURG, W. VA., FIRE DEPARTMENT TO GRAFTON, W. VA. THIS SAVED GRAFTON FROM DESTRUCTION BY FLAMES. FASTEST SPEED EVER MADE ON THAT BRANCH. ENGINE NO. 738, A LITTLE OLD EIGHT-WHEELER, PULLED TWO FLAT CARS CONTAINING FIRE APPARATUS AND ONE PASSENGER COACH. AT TIMES THE SPEED EXCEEDED A MILE A MINUTE. MANY "DEADHEAD" PASSENGERS HELD THE CARS DOWN ON THE RAILS, BUT LOST THEIR NERVE AND DESERTED THE FLYING COMET WHEN A STOP WAS MADE FOR WATER.

"SANDBOX" WAS IN THREE BAD WRECKS IN WHICH THE FIREMEN WERE KILLED. ALSO HE RAN INTO A BOULDER AND SEVEN LANDSLIDES, AND WAS IN ENGINES ON TWO OCCASIONS WHEN THEY TURNED OVER, BUT HE WAS NEVER BADLY HURT.

FLANNERY RETIRED IN 1912. NOW LIVES AT GRAFTON, IN GOOD HEALTH, AGED 90. SON-IN-LAW, H. R. LAUGHLIN, IS SUPT. B. & O. CUMBERLAND DIV. IN '88 LAUGHLIN WAS IN DISPATCHER'S OFFICE AT GRAFTON AND SAW THE FIRE-FIGHTING SPECIAL PULL INTO THE BURNING TOWN.

NEXT MONTH — DAVID B. ROBERTSON
PRESIDENT, B. of L. F. & E.

JOHN HANLEY, BRAKEMAN ON THAT RUN, IS STILL IN ROAD SERVICE.

TRUE TALES OF THE RAILS

Actual Happenings Told by Eye Witnesses

This Might Seem Like a Crazy Place to Ride a Bicycle, but Charlie Murphy Knew What He Was Doing. A Few Days after the Above Photo Was Taken He Hung up an All-Time Record over This Plankway, Which Had Been Built between the Rails of the Long Island R. R. Track near Babylon, L. I.

"Mile-a-Minute" Murphy's Great Ride

By N. A. CRITCHETT

BACK in the Gay Nineties a railroad train was doing pretty good to make a mile in fifty-seven and four-fifths seconds. But for a man to pedal a bicycle at that speed for one whole mile was something to write home about. And when you think it over, it still is.

Charles M. Murphy made that record thirty-five years ago, and it has never been equaled before or since, anywhere on the globe. He did it on a section of Long Island Railroad

track, paced by a special fast train.

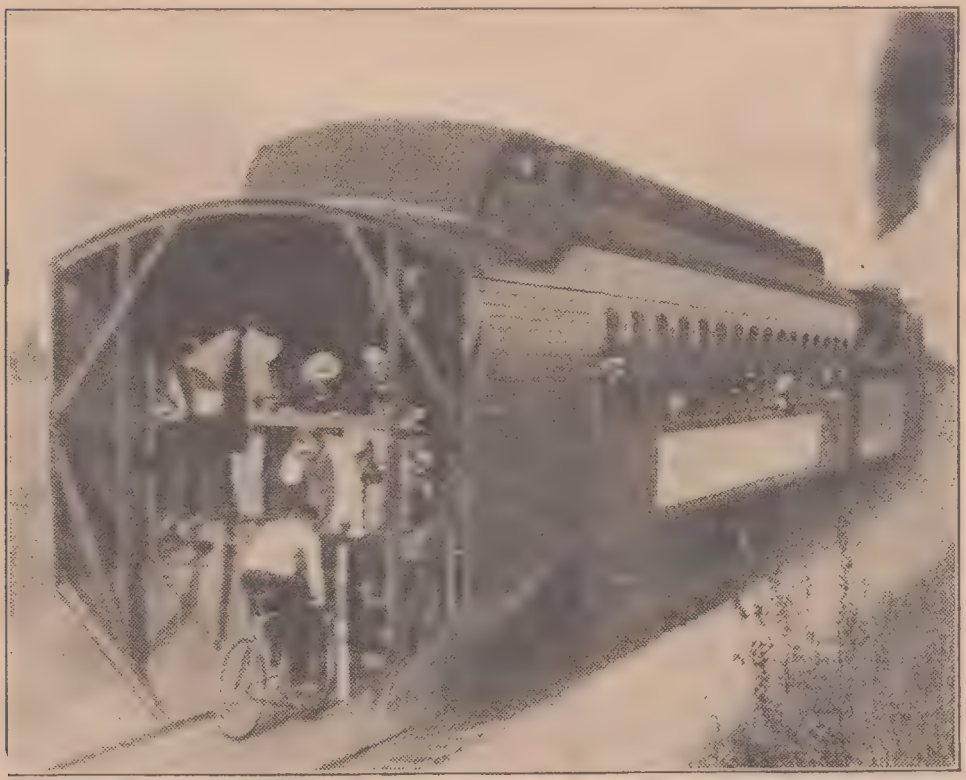
On the 30th of June, 1899, the weather was clear and cool and still. A wooden runway had been laid down for two and three-eighth miles between the steel rails, beginning a mile west of Maywood and extending to Babylon. Five planks, each ten inches wide and carefully planed, had been laid together along the entire stretch. The work was without flaw, smooth as a billiard table. The track was straight, with no perceptible grade.

The Long Island Railroad selected its most careful engineer for the Murphy Special—Samuel E. Booth. A year before Booth had pulled a special train over Long Island for Theodore Roosevelt on a stumping tour for the Governorship. Ed Howell took the scoop beside Booth, with the veteran J. Ousey as conductor.

A passenger coach was hooked onto No. 74, an eight-wheeler, said to be the fastest stepper on the L. I. R. R. at that time.

Even in those days the principles of streamlining were beginning to attract attention. Murphy felt that he stood a better chance of making a record run with a minimum of wind resistance. A hood had been built from the rear end of the coach, projecting about five feet, just the length of his bike. This extended from within six inches of the track to shut off any side wind.

A long strip of white pine had been set exactly in the center of the back



Remarkable Photo Showing "Mile-a-Minute" Murphy Earning His Title by Finishing a Mile in 57 4-5 Seconds behind a Long Island Train on June 30, 1899. Note the Specially-Built Hood at the Rear of the Car. This Decreased the Wind Resistance Enough to Allow Murphy to Ride Faster on a Bicycle than Any Man Has Ridden before or Since.

platform. This the bicyclist was instructed to keep his eyes upon, wavering neither to left or right. Under the passenger coach a rubber roller would sweep the track clear.

Charlie Murphy, slim and blond, was then twenty-nine years old. He weighed 145 pounds, and wore blue woolen tights and a thin, long-sleeved blue jersey. His mustache twitched a bit nervously.

For months he had been trying to persuade some railroad company to let him test his rubber-tired skill by pacing a fast train, but one after another they had turned him down. When, however, he applied to the Long Island his plea was granted, thanks to the intervention of Hal B. Fullerton, a special agent of the L. I. R. R. and an ex-cowboy, who was also a member of the then famous League of American Wheelmen.

Fullerton was now standing on the back platform of the hooded coach, together with J. H. Cummings, L. I. R. R. superintendent of bridges; P. D. Ford, the road's chief engineer, and two newspapermen. Unusually strong men were chosen to occupy this platform—for a reason which will be disclosed later.

Inside the car were about fifty reporters and representatives of athletic organizations, also Murphy's family doctor and a bicycle dealer who was backing the stunt financially.

At 4.30 P.M. the engine and tender made a test run over the course. Murphy was given a last-minute physical exam; his condition was O.K. At 5 P.M. a blast of the engine whistle warned spectators to clear the track. At 5.10 the race was on!

MURPHY'S feet whirred in a cloud of dust. At first he was so excited he could scarcely hold his bike in position. The train pulled away three feet ahead of him before the beginning of the measured mile. His feeble shout, "Wait!" was lost in the thunder of rolling wheels. The future champion was forced to dig into the pedals, his head bent low, at a tremendous cost of energy.

On and on he drove at furious speed. Several times he veered slightly from side to side. After passing the half mile flag he seemed unable to hold the pace, and fell back at least fifteen feet. The spectators groaned. They thought he had lost the race. But Murphy made another extraordinary spurt and regained the shelter of the windshield.

Six times he tried to outrun the train, for the engine was not fast enough. He drove his wheel against the rubber buffer with such force that he bounded backward several feet. All he was heard to say during the wild ride was, "I can't see," in answer to a shouted question of how he was.

"There was a roar in my ears," he explained later, "and I felt as if I were riding in dead air. I felt no suction, and when I fell back from the bumper I knew I could catch up again. So, you see, at that point I was really riding *faster than the train.*

"A man in such a position does not have possession of all his faculties; and it may have been the rambling of a troubled brain, but during the last half-mile I felt as if the boards were coming up—as if they were being lifted up from their fastenings and were about to engulf me. One revolution of the pedals would seem easy, while the next would be like lifting a dead weight."

Suction, it was demonstrated, was not involved in this record run. The reduction of air resistance and friction-making speed depended entirely upon the brawn and skill and clear head of

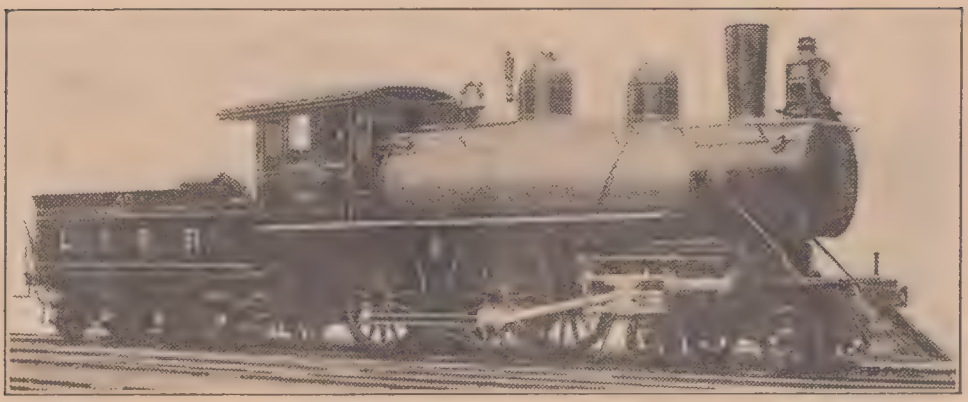


Photo from Joseph Lavelle Collection

Long Island American Type No. 40, One of the Same Series as No. 74, Which Pulled Charlie Murphy's Special Coach, and Which before 1898 Had been No. 38. The 40 Was Changed to 76 That Year. Both Were Built by Baldwin in 1893

Charles M. Murphy. Here is the champion's own account of his whirlwind finish:

"Second by second I crept back into view. Whew, what a relief! Signal of the American flag signifying the finish. The joy in my heart of success. A moment more of suspense. I was riding faster than the train itself, as I was making up lost ground. Head still bent over handlebars, pedaling more fiercely than I ever did before, it seemed like an endless task.

"As Sam Booth, the engineer, passed the mile mark he shut off the steam. The locomotive slowed too suddenly. On I came, and crashed head on into the rear of the train. My front wheel recoiled while the back wheel rebounded and continued to revolve in the air. I pitched head forward.

"A frantic yell of despair went up from the officials on the rear platform. They expected me to be dashed to pieces and sure death. The men on the back of the platform reached out in sheer nervousness and gradually drew me close.

"The pleasure and glory of this long cherished idea was not to be taken from me by death. I reached forward, grabbed an upright on the rear of the car. Simultaneously Hal Fullerton and Mr. Cummings caught me by the arms and pulled both the bicycle and myself upon the platform of the rear car, safe and sound. I couldn't believe it. My mind was whirling. There was a vast roar all about me.

"I lay motionless, face down, on the platform. I was all in. I had been on the platform but a few seconds when our train dashed over the end of the boards that were laid between the rails. I would never have been able to finish my journey on the ties and ballast, which, no doubt, would have resulted disastrously to me.

"Lying on my back, I remained speechless, ashen in color and sore all over from the hot cinders and rubber that came from under the car. Gradually I became aware of what was happening around me. When they saw that I had made it, grown men hugged and kissed each other. One fellow fainted, another went into hysterics."

THUS Charlie Murphy was the first and only man in the world's history who boarded a train while it was speeding at a mile a minute. Upon re-

gaining self control, his first words were: "Carry me to my wife." Mrs. Murphy and their small son had been watching the ordeal from the seat of a light carriage drawn close to the track.

Sam Booth, veteran engineer though he was, was as excited as a schoolboy when the 74 passed the flag at the finish of the race. Abandoning his throttle to the care of Fireman Ed Howell, he galloped back to the rear platform, where Murphy had been dragged aboard in a state of collapse. The strain was almost as great on him as it was on Murphy. In suspense during the whole trip, the engineer hopped around when informed of the success of the venture.

"I thought I'd lost you, I thought I'd lost you!" he reiterated with a semi-hysterical laugh.

Murphy's eyelids slowly fluttered open. His lips creased in a broad Irish grin.

"I would not be afraid to try it again," he told one of the reporters, "and I know I could do even better time. Still, I admit that I wouldn't attempt it unless I were well paid or unless some one else should break my record."

But, you say, the nervous tension must have strained his heart and made him an invalid for life. Nothing of the kind! Charlie Murphy — "Mile-a-Minute" Murphy—suffered no ill effects from his grueling race outside of temporary exhaustion and a few bruises from being pelted by bits of flying ballast.

After resting two or three days he began a tour of the country, doing some fancy bicycling stunts on the vaudeville stage with the aid of a lot of free publicity. Later, having a splendid physique and sound health, he joined the New York police force and helped to organize a motorcycle squad for the officers of the law. As the city's pioneer motorcycle cop and the world's first policeman to fly an airplane, "Mile-a-Minute" Murphy won many worth-while commendations and citations.

Today, at sixty-four, he is healthy and happy, although white-haired. Murphy is living in his home at 190-12 Union Turnpike, Flushing, Long Island, some miles from the scene of his greatest triumph.

He holds seven world's records, seventeen American records, and twenty-nine New York State records, besides being a recognized authority on everything about bicycling. During his long and colorful career the champion cyclist has experienced, according to his own account, at least 195 accidents. The list includes the times when he stopped runaway horses, was hit by automobiles, fell down several stories in old buildings, and waded into street fights where the combatants were using knives. In one accident he fractured a knee cap, causing his retirement from the police force some years ago and giving him a slight limp which he still has.

"But my biggest thrill," he says proudly, "was the day I earned that nickname, 'Mile-a-Minute' Murphy.

"That terrific grind behind the Long Island train," he contends, "was the real beginning of streamlining. Before that, few had any idea what wind resistance meant. The bicycle track record stood at a mark two or three times slower than mine. The idea had come to me a few years before 1899. I had said then that I could ride a bicycle as fast as a train could run, under the right conditions, and that no locomotive ever built could get away from me."

How I Lost My Nerve

By JAMES DEEGAN

A LOCOMOTIVE engineer must have good nerves and sound judgment. But I didn't think so when I was first promoted to the right-hand side. I thought most of the runners were a bunch of old women, and I resolved to show them up. This I did—and soon found myself without a job.

Mexico being a happy hunting ground for boomers, I headed for Cactus Land, hired out on the Mexican Central and shipped to Cardenas, a division point on the "Alligator" Division. Fortunately for me, a locomotive blew up about that time, on account of the pops being screwed down, killing eight men and putting me right in line for a regular engine.

Thus I became a throttle-jerker on the old Mexican Central. It was rather exciting to learn the road, which contains some of the steepest grades in Mexico on the Rascon Mountains between Cardenas and Tampico. These grades average about three and a half per cent, some even five per cent! I understand that the steepest main-line grades in U. S. A. today are only three and a half, so we had plenty to worry about south of the Rio Grande. Every half mile or so I noticed neat little piles of stones decorating the right-of-way.

"What's the stones for?" I asked.

The man who was showing me the road replied solemnly: "Each of those piles marks the spot where an engineer was killed in a runaway!"

This bit of information was not calculated to help my nerves, nor was the additional fact that no engineman had lived to tell about his runaway on the grim and forbidding Rascon Mountains.

One night I was called for an extra. Conductor Snow, a young fellow who had been railroading less than two months, strode over with the arrogance of a drum major and handed me the running orders.

"How's the air?" I inquired, referring to the braking equipment.

"What do I know about your damned air?" he flung back.

Well, grades being what they were, I soon convinced that upstart he'd better learn how the air was working. I wasn't going to supply another neat little rock pile for the right-of-way; not if I could help it. So Snow went back and then reported the air was O. K.

After it had been cut in, the reduction on the air gage was not as pronounced and as long as it should be, so I asked the con if he was certain all of the air was properly connected. He swore it was.

"All right, brother," I said. "If anything goes wrong it's your funeral as well as mine."

But right there I made a mistake in judgment. I should not have taken the word of a greenhorn conductor.

After pitching over the summit I made a service application. The hind end of the train, taking up the slack, gave the engine a bump that nearly knocked me out of the cab. Then I realized that all of the air had not been cut in.

When I released the brakes to re-

charge the train line with air, the train shot out just as if I had been standing on a trapdoor and someone had pulled the trigger. Seeing I could not control the train's speed, I saved the air and every time we approached a curve I gave her the whole works.

Brake shoes pressing hard against the wheels tend to keep them from flying off the track. In the case of a runaway the engine is usually the first to leave the steel, the cars following like a flock of sheep.

Then another danger loomed up. The engine, which had an iron cab, lurched sickeningly whenever we hit a curve, and I was afraid she would give me a wallop. So I crouched low on the deck, watching for curves and trying to steady the old mill with the air. Johnny, the fireman, also was having a hell of a time trying to keep his balance.

Calling across the cab, I told the fireman I'd try to stop when we came to a certain level stretch about three miles long, which we were approaching at an alarming rate of speed. We must have been hitting ninety an hour. At the end of that stretch stood a log section house which was like Redemption Point just above Niagara Falls. Once you pass that, there is no hope; it is like going down a well.

"Watch for that house," I shouted, "and we'll both get off."

When we finally got stopped our headlight was shining full on that section house, at the top of a precipitous curve. Another block and we'd have been done for!

"Johnny," I said, with teeth chattering, "I'm not a bit scared, are you?"

"N-n-o," quavered the fireboy. His face was white.

Just then who should come up but Conductor Snow, still cocky, and he said:

"Deegan, I broke my lamp swinging you down. As soon as we left Cardenas our two Mexican brakemen took their shoes off and went to bed right away. Not a brake had been set on the entire train! The chief characteristic of greasers is their knack of dodging responsibility."

DURING the six months I stayed at Cardenas sixteen engineers answered the last call, only one of them dying a natural death. The mortality rate was so high that I finally decided to pull out while the pulling was good. Leaving for Mexico City, I hired out on the Cuernavaca Railroad.

The regular engine to which I was assigned proved to be a crackerjack, but I soon found that she was over-pressured. There are many bum engineers in Mexico. The limit of their bag of tricks seems to be to take a monkey wrench and screw down the pops. Whoever did the job on this mill was an artist. The steam gage would never go above 165 pounds, although the engine would get hot enough to tremble—which is the preliminary symptom of a locomotive about to blow up.

I was torn with conflicting emotions. If I reported this defect it would be remedied, but the engine's efficiency would be crippled and I would get no pay for overtime. Then I recalled the awful scene at Cardenas, eight men killed from an explosion caused by this very thing. So I reported it.

One day the chief train dispatcher bawled me out for fast running.

"When the sun goes down, tie up," said he, "and you will never be asked to make out a delay report. You are paid by the month, so your wages go on just the same. There's an active volcano in these mountains, and the rails

are likely to shift a couple of feet, any time. Judging from the way you have been running trains, there wouldn't be enough of the remains left to justify us in sending out the wrecker."

Now, I have always had a good appetite. When we pitched over the hump at La Cima I could see down in the valley the lights of Mexico City, where there was always a cold bottle and a hot bird waiting. So I released the air and let 'er ramble. The rate I floated down that hillside was something scandalous.

The next day, when I got to thinking of those mountains throwing flip-flops during the night, it sort of got my goat. The more I thought of the proposition, the less I thought of it. So, without waiting to get back to the terminal, I wired my resignation from the other end of the road, and beat it back to the States.

The Whistle

By T. R. GRESS

As Told to Robert O. Hu'e

ABOUT 1.30 P.M., November 22, 1915, the most disastrous wreck in the history of the Central of Georgia Railway occurred. A special 28-car. train of the Con T. Kennedy Carnival Shows collided head-on with a regular Central of Georgia train. Eleven lives were lost and forty-two persons were injured. The accident happened about six miles west of Columbus, Ga.

Nine of the cars of the show train piled one on top of the other, and several cars and their contents were reduced to ashes. More than nine cars would have been burned, it is said, had not some of the showmen harnessed several mules, which were on one of the cars not badly damaged, and hitched them to the last Pullman, and, one at a time, pulled a long string of cars away from the burning wreckage.

The company had exhibited in Atlanta for a week and was on the way to Columbus and other South Georgia points where it was billed to appear.

The injured—forty-two in number—were rushed to the city hospital at Columbus.

As claim agent for the Central of Georgia Railway, I visited the hospital and secured releases and made settlements with those who were able to transact business at the time. One of the inmates of the hospital was a clown. To what nationality he belonged I do not know; but, in the light of subsequent events, I decided he was Russian.

He was not seriously injured, but was still in bed at the time I called upon him. However, he was very nervous and irritable, and when I introduced myself and told him my business, he began to yell: "My whistle! I want my whistle!"

Thinking perhaps he was a little delirious, I decided to leave him. But on my next visit, some days later, I could get no satisfaction out of him. He would say nothing, except "My whistle! My whistle!"

I explained that the car in which he

was riding burned, and that his whistle probably melted, or was ruined, but he paid no attention, and would talk of nothing else.

I exerted all the patience I could command, but his senseless tantrums angered me, and I finally said: "I didn't come down here to listen to any such foolishness. I represent the railroad, and am ready to talk business. How much will satisfy you in the way of damages?"

"My whistle! My whistle!"

"Will you sign a release for one hundred dollars?" I asked.

"No! No! No!" he shrieked.

"Two hundred?"

"No! No! No!"

I increased the offer to five hundred, but his answer was always the same—"No! No! No!"

"Well, what will satisfy you?"

He paid no attention, but began to yell, "Whistle!"

I left him. The next morning I went out to the scene of the wreck and poked about in the embers, trying to find his cursed whistle. I worked several hours, but my efforts were futile.

The next time I called at the hospital, I tentatively mentioned a thousand dollars. I had no idea of offering him that amount, but wanted to see if a settlement out of court were possible. If the mention of that sum did not interest him, I decided to let him sue.

However, he paid no more attention to a thousand dollars than he had paid to a hundred, and started up the same old song and dance about his whistle.

The following day was Sunday, and I got a sieve and small shovel and drove out to the place where the wreck occurred. There I began the slow and tedious task of sifting those ashes. I worked on and on until late in the afternoon; and when I was about to give up my labors were rewarded. In the bottom of the sieve I found something heavy, about four inches long.

On Monday morning I carried the trinket to a jeweler in Macon. I threw it on the showcase and said:

"Bill, tell me what this thing is worth."

He glanced at it, and carelessly replied: "It isn't worth a damn."

"I'm not joking, old fellow. Take a good look at it, and tell me if it has any value," I urged.

He got a rag and rubbed off some of the discoloration. Then, taking a small bottle from the shelf, he let a few drops of its contents trickle onto the bright spot where he had removed the blackness. I observed that his interest was quickened. He placed it on the scales. Turning to me, he said: "It's worth about eighty-five dollars."

"Eighty-five dollars! You're kidding me, Bill."

"No, I'm not kidding. The thing is gold."

I thanked him, rushed out to my car and went straight to the hospital. When I reached the room of the comedian, I found him sitting up in bed, propped with a pillow. When he saw me, he threw up his hands, and started to yell. But I took the release from my pocket.

"If I find your whistle, will you sign this release?"

He scarcely glanced at it before replying, "Yes, yes."

I took the thing I had found from my pocket and held it before his eyes. "Does this look like it?" I asked.

"Yes, yes!" he exclaimed, joyously, grabbing it and hugging it to his breast.

I watched him silently, as he tried it out to see if it would blow. He found it would, and his eyes sparkled with joy. Then I handed him the release

and my fountain pen, and he readily signed.

As soon as he finished signing, he passed the release back to me, took out his handkerchief and began polishing his cherished whistle. He seemed to have forgotten my presence. I sat there watching him until he had removed every vestige of discoloration, and the thing shone like the polished gold it was. Then he looked up at me and smiled.

"You are the most mysterious person I have encountered in all my experience with the railroad," I remarked.

"Why do you say that?"

"I had that whistle examined by a jeweler in Macon, and he told me it was worth about eighty-five dollars. When I mentioned five hundred dollars to you as a figure of settlement, you paid no attention. In fact, the mention of a thousand dollars did not seem to interest you. Of course, we would not have paid you that amount—possibly not half that, but we might have offered you a great deal more than eighty-five dollars—the worth of that trinket."

"My friend, you do not understand. In the show business I have been all over the world and met many strange people, and some great ones, even kings and queens. And sometimes they show their appreciation of our acts by giving us presents. Yes, this whistle was given me by the Czar of Russia!"

THROW THE LIGHT TO GREEN!

For the Fifth Anniversary Issue of Railroad Stories

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It'll be the December, 1934, Issue of RAILROAD STORIES, out November first

A Model "Big Hook"

By CHARLES G. CUNNINGHAM

THE "big hook," on any model railroad, is an important item. It is an unusual piece of rolling stock, will catch the eye just as fast as a tank car or "reefer," and makes the road look more real. The simplified "OO" gage wrecking crane which I will describe is only another piece of rolling stock, and will be placed in the yards for the same reason the water tank is there: show and only show. But the model is easy and cheap to build.

The cab is a good thing to start with, for when it is finished it will furnish impetus for the rest of the work. The best way to build cab or car sides from flat stock is to make templates (patterns) from drawing paper and stick these to the metal. When making these templates cut out all windows and doors. Make all lines dotted where you desire to bend. If you have much bending to do, always bend the metal with the template on the inside. This avoids stretching the template.

All metal which is to be bent on sharp corners and perhaps hammered should be annealed. To anneal brass (the entire model is of brass) it should be heated to a cherry red and then allowed to cool in the open air. To harden after bending is completed, heat again to a cherry red and plunge in cool water. This annealing prevents the metal from cracking.

After making the templates and putting them on the metal, do not make the mistake of sticking them too close to each other, but leave plenty of space for the snips to get in between without bending the templated metal. The cab roof, back, front,

sides, and bottom are all made of 1/64" sheet brass. They should all be annealed before any work whatsoever is done.

When you have the templates stuck on the metal, cut out the windows and doors by drilling a series of small holes along the inside. These holes should overlap each other so that when the last piece is drilled the metal will fall out with a light tap. File the windows and door edges to as straight a line as you can with a fine file.

After bending the cab to its proper shape, clean the template off the cab, and use emery and gasoline to clean up the cab for soldering. Lay the cab sides and back on the shelf for the time being.

Next are the window frames and door. The frames are made of strip brass 1/32" wide and 1/64" thick. The door is any piece of metal that will cover the rectangle in the cab with about 1/16" overlap.

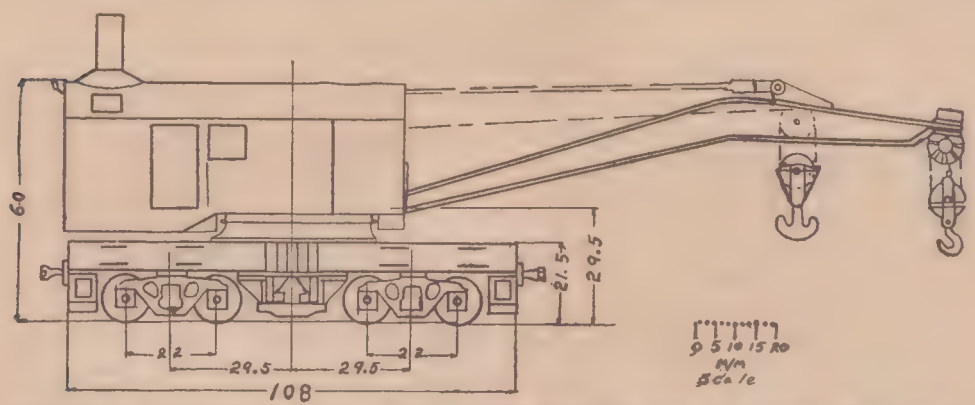
The roof should be cut to the general shape of the roof shown in the photograph. To get the curvature required is simple. Take a piece of cloth or burlap and fold several times to make a pad. Lay the annealed brass roof on this cloth; then get a piece of 1" or 1½" round wood. Roll the wood on the brass piece from side to side. The brass piece, due to the uncertain backing of the cloth, will start to roll in a curve. Try it frequently on the cab ends to test for proper curvature.

After obtaining this curve, cut out the slot for the boom-hoisting pulleys. On the right side of the boiler is a small trap door that is 6 x 4 millimeters in size and 1/32" thick. There is a rain guard over the door, for which you will need a small piece of No. 60 drill rod. The whistle is a piece of 1/16" rod with a piece of No. 80 drill rod stuck in the end.

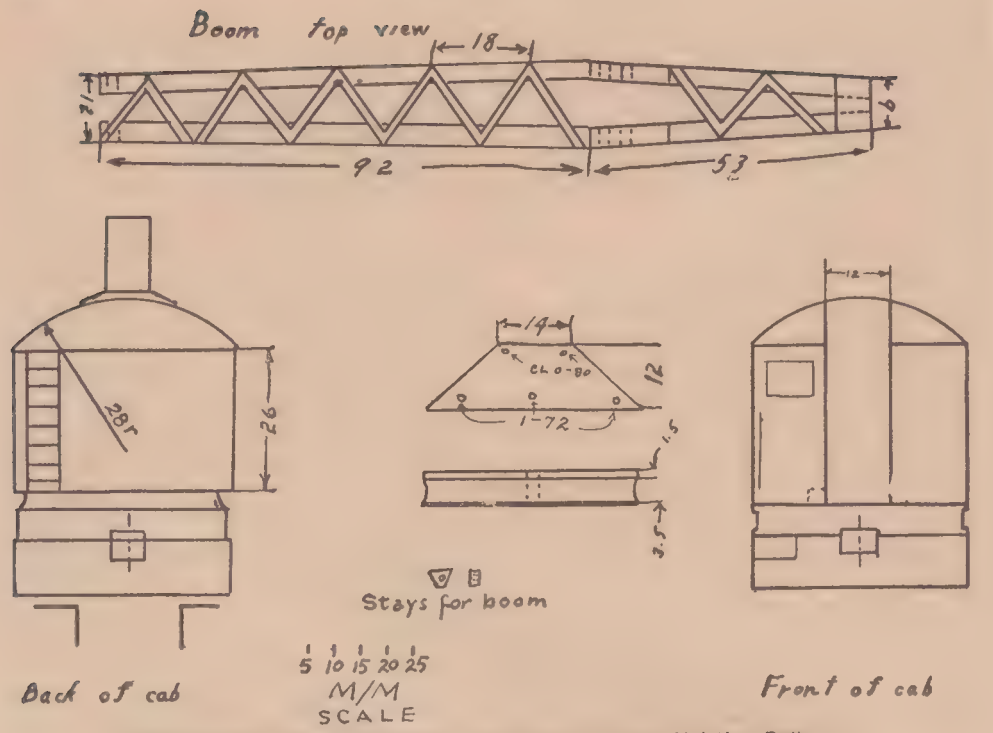
The stack is made of a piece of brass tubing 7/32" o.d. and 14 millimeters long. The cone piece is laid out on drawing paper and then a template is made. Only when the template forms the right shape when brought together, make it of brass. The ring that forms the top of the boiler and shows above the roof is 18 millimeters in diameter. This ring should be filed with a half round file until it fits the curvature of the roof. Before laying away the roof and stack, drill two No. 62 holes in the stack opposite each other and 3 millimeters down from the top. These are for the stays.

The anchorage for the boom pulleys is next. This is in the general shape of a rectangle. Cut two pieces of brass, 4 millimeters wide, 32 millimeters long and 1/16" thick. Drill a hole through one end for a piece of 1/16" drill rod; leave the other end plain. Make two small blocks with a 1/16" force fit to anchor the above pieces to the roof.

The floor is the simplest of all. It is 74 millimeters long, 40 millimeters wide, and 1/64" thick. Run a center line down it, and 52 millimeters from the back drill a hole that will clear a 6-32 screw. All steps



Side Elevation of Model Wrecker, Fashioned after Actual Delaware & Hudson "Big Hook" Shown on Opposite Page. All Measurements Are in Millimeters



Details of Cab, Boom, Turntable, and Plates for Boom Hoisting Pulleys

and hand rails are No. 60 drill rod. For these use dimensions from the drawing.

NOW for the assembly. All the cab assembly is done by sweat soldering. Take the cab and wipe the edges clean with gasoline and polish with emery. Next cover with a good grade of soldering paste and put on a small amount of solder. Have a hot iron and a big one, for the metal will absorb heat and cool your iron off if it is too small. After the edges of the cab, under side of the roof, and the top side of the floor have been coated with solder, lay the cab on the roof and apply the iron without any solder on it. You should have enough solder on the roof and the end of the cab to make a good joint. Wipe off all excess solder which flows out.

The rain guard is sweated in place as are the stack, cone and ring when they have been heated and tinned. The 6-32 screw is then placed in the floor and the cab is sweated to the floor.

The turntable can be made without a small lathe or with it. If you haven't a lathe, take a piece of brass tubing 1⅜" outside diameter and cut off a piece 3½ millimeters long. Square this on both ends. Next tin it with a hot iron. Draw a circle 40 millimeters in diameter on a piece of brass 1½ millimeters thick. Tin on one side only, and drill a clearing hole of 6-32 screw size in its exact center. Sweat solder this plate onto the brass ring.

On the other end of the brass ring solder a 1/32" thick brass plate 40 millimeters square in the same way you soldered the round plate, remembering the 6-32 clearance hole for the king pin in the exact center of the plate. This square plate is later soldered onto the deck of the main frame.

The deck of the main frame is a piece of brass 108 millimeters long, 40 millimeters wide and 1/32" thick. Drill a 1/64" hole in one side for the brake wheel, which is of the sunken type, to clear the crane when it is in motion. In the center of the plate

drill a clearance hole for 6-32. Next do the tinning to prepare for soldering the turntable on, and for soldering the main deck to the side and end girders.

THERE is nothing difficult about the construction of the main frame girders. They are 1/4" wide with 1/32" flange. The side girders are 108 millimeters long; the end girders 40 millimeters long. All are the same thickness. As there are quite a few rivets which show very prominently, it is a good idea to make a small tool to emboss these on the girders. It can be made by grinding down an old center punch and giving it a radius of 1/64" or less. The hand holds are No. 60 drill rod forced into the holes and caught with a drop of solder on the inside. A small stay for the trucks, with a 1-72 hole tapped in it, is soldered across the bottom of the girders 29½ millimeters from the 6-32 king pin hole center.

The outriggers, like the rest, are dummy and can be built up as in the photograph, and by taking your measurements from the drawing. The trucks are standard Bettendorf with 33" wheels. They can be bought at low cost with wheels furnished.

The boom is a tricky piece of construction. It must be built up of flat stock 1/32" thick. Mark out the main girders on templates and cut to the form shown in the side elevation. Then cut a long strip of metal 1/8" wide and sweat solder this to the top and bottom of these girders. This long 1/8" strip should furnish the top and bottom flange of the main girders for the boom. The top of the boom has a single system of stays; the bottom has double bracing. These stays are made of angle iron and are applied with a soldering iron.

The boom pulleys are 5 millimeters in diameter and have a small round groove in them. This groove can be made by grinding them in a lathe with a half round nose tool. The big hook pulleys are 8 millimeters in diameter and 1½ millimeters thick. The side plates are 1/64" thick. Use 0-80 screws with a piece of tubing as a spacer. The auxiliary pulleys are 9½ millimeters in diameter and have the same shape groove in them as the main or big hook has. The plates for the boom hoisting pulleys are 40 millimeters long and 1/64" to 1/32" thick. The front holes are drilled to clear a 1-72 screw with the back holes tapped and drilled for an 0-80.

To get the model ready for painting clean off all solder from the plates, wipe with gasoline and allow to dry. Wipe again and then, if you can get it, use a motor-driven scratch brush to produce a smooth finish on the annealed brass. Paint the outside black and the cab inside red or green.

If you place this model in a work train, place a flat car ahead of the boom, or better yet, a regular supply and sleeping car that belongs with the crane. There is usually a flat car loaded with wheels, slings, bolsters and jacks just behind. And if you have any questions, write to me at 3435 Gates Place, N. Y. City.

The Trading Post

WILL trade Keystone movie projector and several reels of film for pair Lionel O gage switches, or any reasonable offer in 1⅜" gage equipment.—H. Ludlow. 3310 Kossuth Ave., N. Y. City.

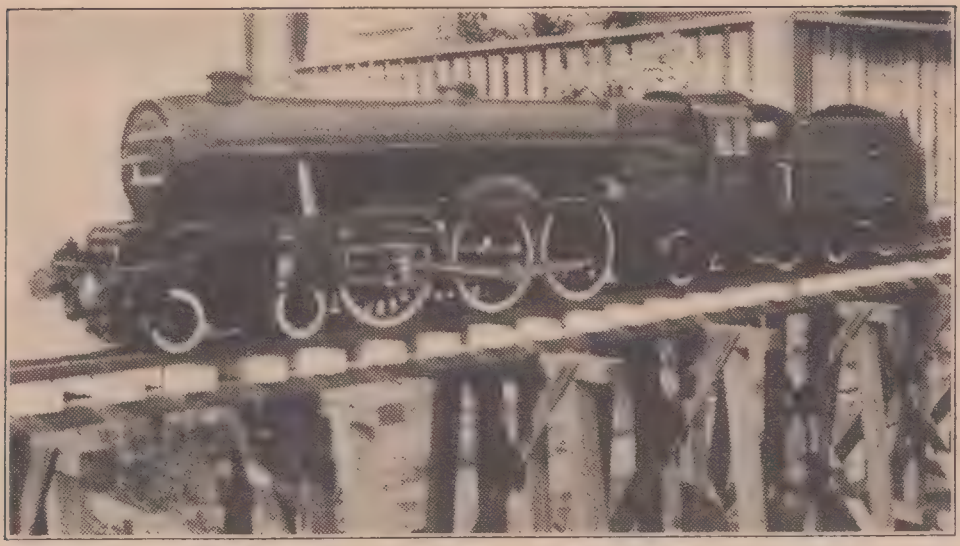
* * *

I NEED O gage equipment, no round track. Will swap recent back numbers of "Railroad Stories" and detective magazines, also 34 boys' books, stiff bound, such as Ralph (railroad series), Rover Boys, etc.—J. Haley, 499 Dean St., Brooklyn, N. Y.

WILL EXCHANGE 25 back issues of "Railroad Stories" and 2 complete volumes of "The Modelmaker" for O gage track and switches, preferably Lionel.—J. Schulze, 73 Lake Place, New Haven, Conn.

* * *

WHAT am I offered for my standard-gage electric train set, Lionel and Ives, excellent condition, including locos, cars, track, switches, stations, signal tower, etc.? For details send reply postal.—E. Leight, 540 Briar Pl., Chicago.



A Beautiful Model of the British "Princess Royal" Class, 4-6-2 Type, Built by Henry Hospers

I HAVE just completed a ¾" scale model of the London, Midland & Scottish Ry. "Princess Royal," 56" long, 10" high, 6¾" wide; has four ⅞"x1¾" cylinders, and 125 lbs. boiler pressure. Equipped with ball-bearings. Joy valve gear actuates the valves of cylinders inside the frame and Walschaerts gear on outside wheels (drivers). All are set 45 degrees on the cranks with relation to outside crankpins, thus giving 8 exhausts to the revolution. I'm building 10 L.M.S. type coaches for her; they will be 42" and 45" long respectively.—Henry Hospers, 26 Suffolk St., Fairport, N. Y.

* * *

I HAVE many old air, war and detective magazines to trade for O gage trucks wheels, and driving wheels. Also will swap O gage track, etc., and engine pictures for ¼" scale equipment, or will buy same. Will exchange specifications and data on C.G.W. for same on other roads. What have you?—James Deyo, 310 2nd Ave. N. W., Oelwein, Iowa.

* * *

WILL trade 2 copies "Official Guide," engine photos, train orders, R. R. employee magazines, etc., for used Lionel steam type engines, track, cars, switches; or will buy. Use reply postal in writing for details.—Wm. Wiltsie, Jr., Box 22, New Providence, N. J.

CHICAGO Model Builders' Guild meets 1st and 3rd Friday each month at 20 N. Wacker Drive, 36th floor, Lighting Institute. We usually have a talk on model building. For information write C. H. Hoffman, 3642 N. Lotus Ave., Chicago.

* * *

MODEL railroaders in vicinity invited to join Cascade Pacific Ry. Club.—Lee Allen, 209 Oglesby St., Salem, Ill.

* * *

I NEED steam type O gage outfit (preferably with old Ives No. 1122-R automatic reverse, and freight train), for which I offer in exchange Lionel 342 passenger train, standard-gage, including N.Y.C. type loco No. 318, 2 Pullman cars No. 339, ob. car No. 341, and 14 sections of track—or will sell my outfit, either with or without 24 volt transformer.—Chas. Brewer, Mifflintown, Pa

* * *

I HAVE Crosley radio parts (write for list on reply postal card) to trade for 4 sections Lionel straight track, O gage, and 1 Lionel bumper No. 025. Who will send me plans for model railroad?—R. Monaco, Box 383, Weston, Mass.

* * *

AM disposing of my Lionel O gage equipment; write for list on reply postal.—J. Willetts, Roslyn Hts., N. Y.

* * *

WILL trade for or buy 2nd hand Lionel switches or switches that alternate with Lionel track.—H. Bell, Box 143, Rankin, Texas.

I HAVE science magazines (write for list on reply postal) to trade for Lionel or Ives locos and equipment.—N. Mesz, 206 3rd Ave., Westwood, N. J.

* * *

WILL trade electrical apparatus for O or OO gage track or rolling stock.—F. Wimmer, 5630 N. Richmond St., Chicago.

* * *

I WISH to buy Lionel or A.F. standard gage steam type locos, track, equipment. Give details.—A. Fisher, 279 Harding Ave., Teaneck, N. J.

* * *

WOULD like to dispose of my standard-gage equipment. Use reply postal card in writing for details.—H. Hanson, Jr., 333 Liberty St., Dundee, Ill.

* * *

WANTED: 75 sections of used O gage track (curved, straight, switches) for new model road, Redwood Valley Connection R.R., which I am building. Quote prices.—E. H. Nervo, R.F.D. Box 66, Geyserville, Calif.

* * *

I HAVE 14 issues of "Model Craftsman" (March, '33, to June, '34, except Aug., '33) to swap for 3 Lionel or Ives passenger cars at least 12" long. Also I have 42 car wheels and 4 loco drivers for O and standard-gage. I am working on a free lance 4-4-0 standard-gage loco to run on P. S. & W. Ry., owned by Tom Clement, 639 Clinton St., Camden. This road has 100 ft. of track. Visitors welcomed. The first 2 paragraphs of Goodrich's article "How I Built a Steam Model" (Aug. issue) are unfair, because many fellows cannot afford mechanical parts, castings, machinery, etc.—E. Hilland, 523 Royden St., Camden, N. J.

* * *

WILL trade 2 A.F. standard 8-wheel cars, ob. and Pullman, for O gage equipment only; or sell cheap.—G. Cleicher, 1081 E. 9th St., Brooklyn, N. Y.

* * *

AM in the market for old Lionel street cars, any model, any condition. I have a model system in my basement, with overhead catenary trolley and multiple unit cars. Most of my cars are Lionel Nos. 18, 19 and 190, which I rebuilt into interurban models of same type as Ill. Term. System running between St. Louis and Peoria, Ill.—Ewing Dale, 321 Ten Forsyth St. Bldg., Atlanta, Ga.

* * *

I WILL buy O gage toy street cars, electrical or mechanical, any manufacturer; no models containing wood or cardboard.—N. Brown, 94 Sylvester St., Rochester, N. Y.

I HAVE No. 8 Gilbert erector set, valued $25, to sell or exchange for ¼" scale model R. R. equipment or other types scale model machinery.—A. Shapin, 3546 Lawrence Ave. Chicago.

* * *

LOCOMOTIVE No. 4 (pictured on page 96, Feb., 1934, "Railroad Stories"), is for sale. Or will consider trading it toward miniature steam ry. equipment about 16" gage.—A. D. Slater, 12522 Cornado Ave., Cleveland, O.

* * *

I WOULD like to buy from someone in this vicinity 65 ft. used mechanical (wind-up) track for gravity line I am building.—L. Bresee, 750 Park Ave., East Orange, N. J.

* * *

I HAVE 4 Lionel driving wheels, a Brown & Sharp 1-inch micrometer, and a pair of adjustable spring calipers which when open measure 5¼", to trade for 2¼" gage rolling stock, preferably motive power, any make, used but in good condition.—E. Richter, 362 Jackson Ave., Jersey City, N. J.

* * *

MODEL railroaders in this vicinity are invited to join Brooklyn R. R. Club, Dunwood Western Lines, ½" scale system.—H. W. Saler, 338 74th St., Brooklyn, N. Y.

* * *

IN the attic of my home I have a model road, ¼" scale, O gage. Gravel roofing paper is used for roadbed. I made my own rolling stock mostly from plans described in various issues of "Railroad Stories." I have frt. and pass. depots, switch tower, signals of my own make, crossing gates, etc. Now building roundhouse and turntable from plans in Sept., 1934, "Railroad Stories." I use Lionel and A.F. steam type motive power. Will someone send me plans for coal bunker?—E. W. Martin, 200 Union St., Holbrook, Mass.

* * *

WILL someone please help me to construct a hand reverse on Lionel O gage electric type engine No. 250?—Wm. Russell, 404 N. Broom St., Wilmington, Del.

* * *

I NEED used Lionel O gage steam type locos and Pullmans Nos. 600 and 607; state prices.—Fred Stindt, 1517 Paru St., Alameda, Calif.

* * *

WANTED: All parts of model roads that you plan to junk. I am an ex-boilermaker's helper on the N. P. and an old model builder. I need help in getting started again with a model pike.—Robert King, Star Route 2, Porterville, Calif.

WILL buy OO gage equipment or will give Lionel standard gage equipment in exchange for it.—J. Lipman, 23 Calvin Terr., West Orange, N. J.

* * *

I WISH to dispose of my O gage model road, 75 double-truck Ives, Bing and Lionel frt. and pass. cars, 4 engines, 3 transformers, home-made track and signals.—E. Damast, Arlington Ave., Relay, Md.

FOR sale or will trade for O gage equipment: 3 Buddy L 1020 wrecking cranes, No. 1009 4-wheel side dump car, No. 1003 tank car, late issues B. L. F. & E. magazine, etc.—H. Wilk, Maybury San., Northville, Mich.

* * *

WILL swap O gage track for hand-operated targets, cars, etc.—Wm. Clifford, 220 Miami St., Buffalo, N. Y.

A RAILROAD BUILT BY CONVICTS

Tiger Camp Fill and Cut on the Convict-Built Railroad

FRENCH Guiana in South America is a fair-sized country, but its railroad system is one of the most modest in the world. It has one narrow-gage line running from St. Laurent, in the penal settlement, inland to St. Jean, 7½ miles. The line has three wood-burning locomotives built in France and possibly half a dozen cars. It is the entire railroad system of French Guiana. The whole line is inside the penal settlement, and was built by convicts in the late 1890's. Prisoners who have served their time at Devil's Island are brought to St. Laurent and taken by train to St. Jean. This is a nice ride through rolling hills, thick with trees. Sometimes they don't ride, though. Many times, instead, they are made to push their own train. Seven and a half miles is quite a way up and down those hills. But they don't complain. The old-fashioned buildings of the St. Jean penitentiary, painted a washed-out white, are freedom compared with the Ile du Diable.

St. Jean is located almost on the very spot where early explorers expected to find El Dorado—or King Doré's Palace, as the French called it, where the good monarch was supposed to have bathed in a pool of liquid gold. It was a favorite hunting ground of Christopher Columbus, who discovered the country. There is gold under foot. Placer mines have scooped up most of that around St. Jean; much gold remains farther in the jungle. Unluckily it is very hard to get out. In a country where it rains for eight out of the twelve months, railroads become choked with undergrowth almost as fast as they can be cleared. There is not always convict labor, as at St. Jean, to keep the tracks open. The St. Laurent-St. Jean line has a gage of 60 centimeters (about two feet). Trains generally run with one car, which is built with rows of seats clear through, like an old-fashioned bus. Canvas flaps let down at the sides to keep out the tropic torrents. It is used very little, as freight can go by steamer up the Maroni River just as well.

When the convict makes his last journey down the narrow-gage from St. Jean to St. Laurent as a libéré—or "free" man, provided he doesn't go any farther—he is allowed to take a piece of land and get married. He can roam about a little, visit the chewing-gum works, watch the distillation of oil of rosewood, and possibly steal a pellet or two of gold at one of the placer mines by swallowing it. Many of them eventually prosper and build homes in St. Laurent. "It is like a little piece of Normandy," said a French visitor. "And the chuffing of the Decauville (narrow gage) railroad makes the illusion complete."—J. W. Holden.

By the Light of the Lantern

Ask us what you want to know

RAILROAD questions are answered here without charge, but these rules must be observed:

(1) Not more than two questions at a time. No queries about employment.

(2) Owing to the number of queries, no engine specifications are printed except type, driver and cylinder dimensions, weight, and tractive force (t.f.).

(3) Sign your full name and address as evidence of good faith. We will print only initials, without street address.

(4) Always enclose a self-addressed stamped envelope, to facilitate our getting in touch with you if necessary.

(5) Answers to questions are published in this department. Don't be disappointed if they do not appear at once. This department is printed two months in advance of date of issue.

IS the Stephenson valve gear in any way superior to the Walschaert?—M. A. L., St. Paul, Minn.

The only possible point of superiority in the former is that its lead or valve opening at the end of the piston stroke increases when the reverse lever is hooked up toward the center, whereas the lead of the Walschaert gear is the same at all points of cut-off. This might be an advantage on high speed locomotives, for when the piston is moving fast there is need for a quick and wide valve opening. The point, however, is largely academic. In actual use the Walschaert gear, which may be adjusted beforehand to the desired cut-off and which is now being equipped with variable cut-off devices on many locomotives, has proved eminently satisfactory for high speed service. Its practical advantages, such as its accessibility, long wear and light weight, make it by far the better of the two.

WHAT weight of rail is most used in this country? What percentage of each weight? (2) What are the dimensions of railroad ties?—A. B. H., Huntington, W. Va.

(1) In 1932 our Class I railroads maintained the following rail on their main lines (these figures do not include sidings, etc.):

Weight of rail per yard	Miles of track
Under 50 lbs.	630
50 to 59 lbs.	9,350
60 to 69 lbs.	21,962
70 to 79 lbs.	31,401
80 to 89 lbs.	49,991
90 to 99 lbs.	63,830
100 to 109 lbs.	51,762
110 to 119 lbs.	15,101
120 to 129 lbs.	3,235
130 to 139 lbs.	18,349
140 lbs. and over	91

(2) Ties vary according to traffic and weight of rail. Most of them range between 6" x 8" x 8' and 7" x 9" x 8½'. The latter size is considered standard.

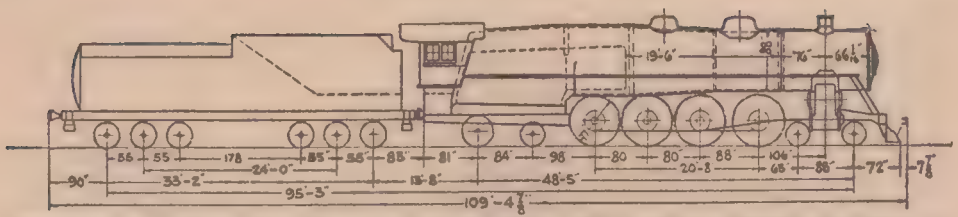
WHY is steam from the air pumps on some Great Northern engines exhausted from a separate pipe alongside the smoke stack, instead of from the stack itself?—A. F., Auburn, Wash.

As you undoubtedly know, exhaust steam from the pumps creates a draft in the firebox. When drifting down long grades this draft is not desirable, especially for oil-burning locomotives, whose oil burners are shut off when the engines descend grades. Under such conditions the cold air drawn into the empty firebox is dangerous, for the sudden cooling of the sheets causes unnatural stresses and thus produces leaks.

WHAT do the initials IP&CRR stand for?—D. R., Los Angeles.

Either the Indianapolis, Peru & Chicago R. R., now part of the Nickel Plate; or the Indianapolis, Pittsburgh and Cleveland, now the Big Four.

WHY was the Caprotti valve gear taken off the B&O's engine "President Cleveland"? Why isn't this gear being used more extensively in our country?—E. C., New Brunswick, N. J.



Giant New 4-8-4 Type Fast Passenger Engine Which Has Just Been Built by Baldwin for the Northern Pacific. She Has 29 x 31 Cylinders, 260 Lbs. Pressure, Exerts 69,800 Lbs. T. F. Photos and Complete Details in Next Month's Issue

According to George Emerson, B&O motive power chief, the cylinder castings were defective and had to be removed. The B&O was short of passenger engines at the time and was able only to replace them with the conventional type cylinders, using the Walschaert gear. Nevertheless, the B&O intends to continue its experiments with Caprotti and other poppet valve gears.

The Caprotti gear is not widely installed because its advantages, if any, have not made it worthwhile to put it in place of existing valve gears, nor has it even proved exceptional enough to warrant its being installed on new engines. Although we believe it will find wider use, we doubt that it will become universal.

WHY does one short blast of the whistle sometimes follow the calling in the flag signal?

(2) *What does this signal mean: two long blasts, one short, and one long?*—W. E., Paterson, N. J.

(1) It is used when there is more than one track. Two or three short blasts after the regulation signal are employed when there are three or four tracks on the main line.

(2) See page 84 of last month's issue.

W. F. W., Nashville, Tenn.—The Middle Tennessee R. R. was incorporated in 1907, partly opened in 1910 and completed between Franklin and Mt. Pleasant, Tenn., 45 miles, in 1912. It was standard gage, had 2 locomotives, 2 passenger and 46 freight cars. In 1917 it began to lose money, and it went out of business in 1920.

G. W. H., Circleville, N. Y.—British locomotives rarely use headlights, although they do run at night. Those on the Continent are usually equipped with some sort of headlight. The practice in most countries there is to use two of them, one on each end of the pilot beam or in a similar position.

(2) Before its line was rebuilt and the famous Tunkhannock viaduct was constructed north of Scranton, the Lackawanna followed the route which you described. A paved highway now follows the track bed for some miles and many of the old depots are used for gas stations, stores and homes.

T. E. G., Springfield, Mo.—What was known as the Central Division of the old Atlantic and Pacific began at Seneca, Mo., and extended to Sapulpa, Indian Territory, 112 miles. The line was completed to Vinita in 1873, and from Vinita to Sapulpa between 1873 and 1886. This division of the old A&P is now part of the St. Louis-San Francisco. Thus it must have entered what is now Oklahoma in 1873 at the latest.

J. D., Chicago.—For 10 days in Dec., 1919, the "Twentieth Century Ltd." was pulled off, due to a shortage of coal. This cannot be considered as an avoidable lapse, and it is correct to say that this train has been operating ever since June 15, 1902. No. 29 of the PRR, known as the "Pennsylvania Special," was inaugurated on the same date, was pulled off Feb. 1, 1903, installed again June 11, 1905, and called the "Broadway Limited" on May 29, 1919, under which name it is now operating.

HOW would I route a pass which would permit me to visit Conn., R. I., Mass., Vt., N. H., and Me. with the shortest possible trip?—W. W., Indianapolis, Ind.

Indianapolis to New York City on the PRR; New York City to Boston on the New York, New Haven & Hartford (this line runs through Conn., R. I., and Mass.); Boston to Portland and return on the Boston & Maine (through Mass., N. H. and part of Me.); Boston to Albany, N. Y., on the Boston & Maine; Albany to Indianapolis on the New York Central—Big Four. The Boston & Maine between Boston and Albany merely passes through the southwestern corner of Vermont, and the biggest town it hits in that state is Pownal. Therefore if you do not feel that this route would really give you a visit to Vermont, you could easily get any passenger agent's advice on a route between Portland and Albany that would not take you back to Boston, but would bring you farther into Vermont.

This Nifty Little Santa Fe Eight-Wheeler of Years Ago (She Was Built at Manchester in 1883) Was Numbered 0151. Why the 0? It's Like This: In 1900 John Player, Super of Motive Power, Renumbered All the Santa Fe Engines. Those Which He Figured Wouldn't Last Long—the Older Types and Junk from Absorbed Lines—He Put in a Special Group with an "0" in Front of Each of Their Numbers. Thus When These Were Scrapped or Sold There Were No Gaps in the Regular Roster. S. R. Wood, Stillwater, Okla., Who Sent Us This Rare Photo, Wants to Know When the Last Engine So Numbered Was Disposed of. Can Anybody Tell Him? The 0151, He Says, Had 17 x 24 Cylinders, 63-In. Drivers, 13,500 Lbs. T. F. Photo Was Taken at Guthrie, Okla., about 1910

E. D., Owens, W. Va.—The old-time locomotive on exhibition at the Portland, Ore., Union station is the famous "Oregon Pony." It was constructed by the Vulcan Iron Works at San Francisco in 1861 for service on the Oregon Portage RR., a 5-mile line on the south side of the Columbia River at Bonneville. Put in service in 1862, it was moved to The Dalles in 1863, where it remained idle until it was shipped back to San Francisco in 1866. There it was used for grading streets and was finally stored in a warehouse. It was badly damaged in a fire, but it was rebuilt in 1905 by David Hewes and presented to the State of Oregon for the Lewis and Clarke Fair. Then it was stored by the UP until 1929, when it was placed on exhibition in its present location. It has 6 x 12 cylinders, 34-in driving wheels and weighs 9,700 lbs.

S. P., Oakland, Calif.—The Canadian Pacific uses the usual "31" and "19" forms of train orders. The Southern Pacific, however, did away with these forms on June 15, 1930, and substituted a train order blank numbered CS-2600. This blank is used for all kinds of train orders. When used in the fashion of a "31" order it is issued according to Rules 211, 211(D), and 211(E), which provide protection for the situation. We shall be glad to hear about other roads, if any, who have discarded "19" and "31" orders.

WHAT kind of law determines (1) the number of men in a crew (2) the minimum number of hours' layover between trips?

(2) *In case a call boy cannot find his man, does this man's name remain at the top of the list, and is he given demerits if he can furnish no acceptable excuse?*—E. R. H., Brooklyn.

(1) The number of men in a crew is decided either by state law or agreements of the Brotherhoods with the railroads. The minimum layover of railroad men of all classes is stated in Sec. 2 of the Hours of Service Act, passed by Congress in 1907, which provides that a railroad employee must have 10 consecutive hours off duty after he has been on duty for 16 continuous hours, and 8 hours off duty if he has been on duty 16 aggregate hours in any 24-hour period. Thus if a man goes to work at 7 A.M. and remains on duty until 11 P.M. the same day he cannot report for work until 9 A.M. the next day; but if he works from 7 A.M. to 3 P.M., then from 4.30 P.M. to 12.30 A.M., he is eligible for duty the following 8.30 A.M.

(2) Trainmen and enginemen who are eligible for duty must be accessible either by phone or messenger. If a man is "next up" and cannot be located, the next man on the list is called and the offending party is disciplined according to the practices on the railroad and the judgment of his officials. The call boy, however, does not put his name at the bottom of the list, but generally tries to find him before another train is ready. Just what the discipline might consist of and how long a call boy might look for the man depends on individual circumstances.

F. K. G., Colorado Springs, Colo.—The Midland Terminal Ry. is in reality what is left of the old Colorado Midland. It was incorporated in 1892 and operated between Divide and Cripple Creek until the Colorado Midland was abandoned in 1918, when it took over the CM main line between Divide and Colorado Springs.

(2) Following is a list of steam roads operating in Colorado:

Colorado & Southern (Burlington)
Colorado & South Eastern
Colorado & Wyoming
Burlington
Colorado-Kansas
Crystal River & San Juan
Rock Island
Denver & Rio Grande Western
Denver & Salt Lake
Great Western
Laramie, North Park & Western
Manitou & Pikes Peak
Missouri Pacific
Midland Terminal
Rio Grande Southern
Santa Fe
San Luis Central
San Luis Valley Southern
Silverton Northern
Uintah
Union Pacific

WHAT is the pooling of passenger and freight trains?

(2) Do you think the government should own the railroads?—J. B., Long Beach, Calif.

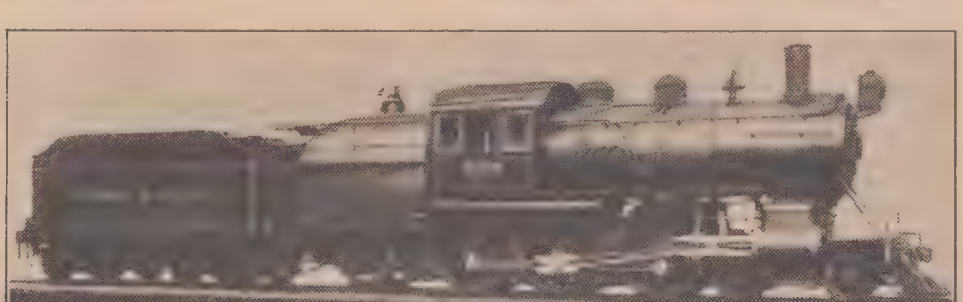
(1) The pooling of passenger and freight trains is the practice of two competing roads running a joint train between certain points which were formerly served by an almost identical train of each road.

(2) When you ask whether or not we think the government should own the railroads, you are asking a question which we believe very few informed people today would care to answer and still fewer would be able to answer competently. It would take a huge book to handle this question the way it should be handled, and even then, in our estimation, you could flip a coin and decide it just as easily.

R. F. B., Hyde Park, Mass.—The European & North American R. R. was chartered in 1850, opened in 1871 from Bangor to Vanceboro, Me., 114 miles. In 1871 the European & North American of New Brunswick was completed from Vanceboro, Me., to St. John, N. B., making the total mileage of the two roads 206. In 1875 they were separated, and the New Brunswick Division became the St. John & Maine Ry. In 1881 the U. S. section had 15 locomotives, 10 passenger and 518 box cars. At present the line in the U. S. is part of the Maine Central; the line east of St. John is part of the Canadian National; and the line west of St. John belongs to the CPR.

(2) The Whitneyville & Machiasport was chartered in 1842, opened in 1843, and ran between Whitneyville & Machiasport, Me. A lumber road, it originally had wooden rails laid with strap iron. It was abandoned about 1895, and in 1881 it had two locomotives and 46 freight cars.

C. M. H., Lakewood, O.—The New York Susquehanna & Western was originally the name given to the consolidation, in 1881, of the



From Collection of W. D. Stoutman, 7444 Forrest Ave., E. Germantown, Phila., Pa.

Lehigh Valley No. 2006, One of the Only Series of "Mother Hubbard" (with Cab Ahead of Firebox) Pacific Types in Existence. She Had 22 x 28 Cylinders, 76½-In. Drivers, 210 Lbs. Pressure, Weighed 241,360 Lbs. without Tender, Exerted 31,700 Lbs. Tractive Force. She Was Class K-1, No Longer In Use

Midland RR. of N. J., the Paterson Extension, the Midland Connecting, the N. J. RR., and the Water Gap RR. In 1893 the NYS&W was consolidated with the Hudson River RR. & Terminal, and that year it also took over the Wilkes-Barre & Eastern, which had been chartered in 1892 and was opened in 1893, when its first train was run. As finally completed the WB&E extended from Stroudsburg to Wilkes-Barre, 64 miles. It ran both freight and passenger trains from Wilkes-Barre to Jersey City, using the NYS&W tracks between Stroudsburg and Jersey City. Its Wilkes-Barre terminal was located on Market Street, across the Susquehanna River from Wilkes-Barre. W. Myers, 77 Covell St., Wilkes-Barre, Pa., has a photo of this station, which was abandoned in 1905, apparently shortly after the WB&E discontinued passenger trains out of Wilkes-Barre. The NYS&W, in turn, was taken over by the Erie about 1900. The line between Hanford, N. J., and Middletown, N. Y., although originally a part of the NYS&W, has been operated by the Middletown & Unionville since 1913.

WHAT is the name of the book which contains all the railroad passenger schedules in this country?—G. L., Merced, Calif.

"The Official Guide of the Railways and Steam Navigation Lines of the United States, Porto Rico, Canada, Mexico and Cuba, and Central America, and All Air-line Schedules," better known simply as the "Official Guide," is published monthly by The National Railway Publication Company, 424 W. 33rd St., N. Y. City. It contains timetables of all railroads and even lists those which run no passenger trains. Single copies cost $2. Yearly subscription is $18.

H. H., Mt. Sterling, Ky.—The Lexington & Eastern was chartered in 1872 as the Kentucky Union Ry. Completed in 1891, it was reorganized three years later as the L&E. It ran from Lexington to Jackson, Ky., 93 miles, had 7 locomotives, 5 passenger and 365 freight cars. It is now part of the Louisville & Nashville.

(2) The Mountain Central, which ran from Campton to Campton Jct., Ky., 12 miles, and had a 7-mile branch to Chimneytop, was 3-foot gage, had 4 locomotives and used 30-pound rail. Built between 1900 and 1907, it went out of existence about 10 years ago.

R. T., San Antonio, Texas.—The Kansas City, Mexico & Orient in the U. S. is now part of the Santa Fe System, but an independent road bearing that name still operates across Mexico, from Ojinaga to Topolobampo. It has 11 locomotives, 254 freight, 11 passenger and 16 miscellaneous cars. It is 332 miles long.

(2) Rail motor cars equipped with horns instead of whistles use whistle codes.

Lackawanna Engine No. 1 on Gee Brook Trestle of the Cincinnatus (N. Y.) Branch, about 1904. Condemned as Unsafe, the Trestle Was Filled in Shortly Afterward

Photo from Wm. M. Hayes, 932 Westmoreland Ave., Syracuse, N. Y.

E. F., N. Y. City.—Canadian Pacific Classes G-3, a, b, c, Nos. 2300-2318, 2320-2325, 4-6-2 type, have 25 x 30 cylinders, 75-in. drivers, 200 lbs. pressure, weigh 306,500 lbs. without tender, exert 42,000 lbs. t. f. Class G-3d, Nos. 2326-2350 has 23 x 30 cylinders, 250 lbs. pressure, 75-in. drivers, weighs 306,500 lbs. without tender, exerts 45,000 lbs. t. f. Classes G-4a, b, Nos. 2700-2717, have 24½ x 30 cylinders, 70-in. drivers, 200 lbs. pressure, weigh 306,500 lbs. without tender, exert 44,000 lbs. t. f.

(2) Following are the steam railroads operating in Nevada:

Eureka Nevada
Nevada Central
Nevada Copper Belt
Nevada Northern
Southern Pacific
Tonopah & Goldfield
Tonopah & Tidewater
Union Pacific (incl. LA&SL and OSL)
Virginia & Truckee
Western Pacific

M. M., Farmington, N. M.—The New Mexico Central RR. was organized in 1908 as a consolidation of the Santa Fe Central and the Albuquerque Eastern. In 1910 it went bankrupt, was reorganized as the New Mexico Central Ry. In 1926 the Santa Fe acquired control of it and now leases it on a year to year basis. The lease is cancellable on 90 days' notice. It runs from Kennedy to Willard, N. M., 59 miles.

WHERE can I get numbers and specifications of PRR engines?—G. P. C., Elberon, N. J.

Space does not permit us to print all the numbers of the PRR engines, for they are not arranged in sequence. It is our intention, though, to print the class roster with specifications some time in the future. In the meantime we suggest you write to Mr. Martin Flattley, 219 E. Rio Grande Ave., Wildwood, N. J., who has a complete list of PRR numbers.

J. C., Minneapolis, Minn.—The Duluth, Missabe & Northern's largest locomotives are its Nos. 400-402, Class P, 4-6-2 type, which have 25 x 28 cylinders, 69-in. drivers, 200 lbs. pressure, weigh 254,600 lbs. without tender, exert 43,200 lbs. t. f. Its largest freight locomotive is its No. 210, 2-8-8-2 type, which has 57-in. drivers, 24 x 32 cylinders, 200 lbs. pressure, weighs 494,450 lbs. without tender, exerts 110,000 lbs. t. f.—with booster, 123,750.

(2) History of Soo Line in future issue.

DO you think a device enabling locomotives to dispose of ashes on the fly, without dumping them on the roadbed, would be worthwhile?—W. G., Chicago.

This does not sound like a very practical idea. Ash disposal under the circumstances you mention is no great problem, for most locomotives have to stop for water and fuel oftener than they do to dump their ash pans. The hoppers under the grates hold a lot of ashes—usually more than most firemen are in the habit of shaking down. If an ash dumping device could be installed at little or no cost, of course, it might have a chance, but in that case there would be no use in making it.

H. A. V., Oakley, Mich.—The Michigan Central uses its Class K-3q, 4-6-2 type, in passenger service between Jackson and Bay City. These have 23½ x 26 cylinders, 79-in. drivers, 200 lbs. pressure, weigh 295,500 lbs. without tender, exert 30,900 lbs. t. f.—with booster 40,600. In freight service it uses Class H-7e, 2-8-2 type, which has 27 x 30 cylinders, 200 lbs. pressure, 63-in. drivers, weighs 328,000 lbs. without tender, exerts 59,000 lbs. t. f.—with booster, 70,000.

F. K.—Following are the divisions of the Missouri-Kansas-Texas Lines:

St. Louis Division—St. Louis to Franklin, Mo.
Sedalia Division—Franklin, Mo., to Parsons, Kan.
Kansas City Division—Kansas City, Mo., to Parsons, Kan.
Columbia Branch—Columbia to McBaine, Mo.
Moberly Division—Moberly to Franklin, Mo.
Eldorado Branch—Nevada to Eldorado Springs, Mo.
Neosho Division—Junction City to Parsons, Kan.
Holden Division—Bryson, Mo., to Paola, Kan.
Iola Branch—Moran, Kan., to Iola, Kan.
Cherokee Division—Parsons, Kan., to Muskogee, Okla.
Choctaw Division—Muskogee, Okla., to Denison, Tex.
Osage Division—Parsons, Kan., to Osage, Okla.
Oklahoma Division—Osage to Oklahoma City, Okla.
Tulsa Division—Osage to Muskogee, Okla.
Joplin Division—Parsons, Kan., to Joplin, Mo.
Wilburton Branch—North McAlester to Wilburton, Okla.

M-K-TR.R.Co. of Texas

Dallas Division—Denison to Hilo, Tex.
Fort Worth Division—Denison to Waco, Tex.
Denton Division—Dallas to Denton, Tex.
Mineola Division—Greenville to Mineola, Tex.
Sherman Branch, Denison to Sherman, Tex.
Henrietta Division—Whitesboro to Wichita Falls, Tex.
San Antonio Division—Waco to San Antonio, Tex.
Houston Division—Granger to Houston, Tex.
San Marcos Division—Smithville to San Marcos, Tex.

Photo by W. R. Osborne, Riverside, N. J.

No. 5 of the Tuckerton R. R., an Eight-Wheeler Constructed by Baldwin in 1891. In Case You Can't Read the Small Print on the Side of the Tender, It Says the Mortgagee Is the Camden Safe Deposit & Trust Co. Maybe the C. S. D. & T. Co. Is Afraid a Big, Bad Man Will Come along and Swipe No. 5 Some Night

Belton Branch—Temple to Belton, Tex.

DeLeon Division—Waco to DeLeon, Tex.

Cross Plains Branch—DeLeon to Cross Plains, Tex.

Stamford Division—DeLeon to Rotan, Tex.

Northwestern Division—Wichita Falls, Tex., to Forgan, Okla.

Wellington Branch—Altus, Okla., to Wellington, Tex.

J. A. B., Tulsa, Okla.—Complete Frisco roster is printed in this issue. Nos. 1613-1632 are the 2-10-0 types built for Russia during the war.

(2) Rock Island Class N78, 2-10-2 type, has 30 x 32 cylinders, 63-in. drivers, 200 lbs. pressure, weighs 405,000 lbs. without tender, exerts 77,800 lbs. t. f.

F. L. M., Lock Haven, Pa.—The Erie still uses Nos. 2510-2568, 4-6-2 type. They have 22½ x 26 cylinders, 74½-in. drivers, 215 lbs. pressure, weigh 243,500 lbs. without tender, exert 32,540 lbs. t. f. We hope to print a complete roster of this road in the near future.

(2) The PRR has two Class K-5 locomotives: Nos. 5698, 5699. Both have 27 x 30 cylinders, 80-in. drivers, 250 lbs. pressure, exert 54,675 lbs. t. f.

AMERICAN railroad fans, particularly young people who want to find out more and more about engines, have hard jobs getting books about their favorite subject. This is not the case in Great Britain, where there are several good titles to choose from. The newest of these is a 150-page book, with 47 full-page illustrations, called "Railway Engines of the World," by Brian Reed. Although it is simply written, and is certainly not intended to be a technical work, it is full of rare and interesting information, and we have a sneaking hunch that many master mechanics and motive power men could find in it a few things they never knew before. The greater part of the book is concerned with locomotives other than those in North America. Only one chapter, called "Monsters of the Rail," takes up American and Canadian motive power. It does this sketchily but fairly, and with only a few mistakes. Anyway, why should American fans concentrate their interest on American engines and railroads alone? Foreign motive power is just as interesting as ours. English engines are small and toy-like, but they have beautiful lines, and they can run as fast as anything on wheels. The new German high-pressure and turbine locomotives are opening up a whole new field in steam power. French Super-Pacific types run 227 miles every day between Paris and Liége without stopping, averaging better than 60 m.p.h. Even in the wilds of Africa, or north of the Arctic Circle, there are fascinating specimens of the iron horse. . . . The book is published by the Oxford University Press, Amen House, Warwick Square, E. C. 4, London, England, and sells for 3/6 net (about $1).

G. T., Ocean City, N. J.—The Tuckerton RR. was incorporated in 1866 as the Barnegat RR. Its name was changed twice, and it acquired its present title in 1880. It runs from Whiting Station to Tuckerton, N. J., 29 miles, has 4 locomotives, 4 cars, 1 caboose. In 1932 its deficit was $14,537; in 1931, $19,539; in 1930, $1,307. We are printing herewith photo of its engine No. 5.

(2) The Great Northern, C&NW, and Bangor

& Aroostook color their cars Pullman green; the Milwaukee's are yellow; the Canadian Pacific's are maroon.

F. E. S., New Castle, Pa.—The Carrolton & Worthville was incorporated in 1905, completed in 1906 between Carrolton and Worthville, Ky., 9 miles. In 1929 it was reorganized as the Carrolton RR. It is now controlled by the L&N, which owns all its stock and practically all its bonds. It has one locomotive, uses 64-70 lb. rail. The road and equipment are valued at about $105,000. Total assets amount to about $108,000.

K. E. H., Oklahoma City, Okla.—The Okmulgee Northern was incorporated in 1915, opened in 1916 from Deep Fork to Okmulgee, Okla., 10 miles. It has 2 locomotives, 1 miscellaneous car. Road and equipment are valued at $414,000; total assets are $703,590. Apparently the line is making money: in 1932 net operating income was $21,485, and net income (after all charges) was $18,315. In 1931 net operating income was $162,745; net income, $157,050. No figures available on 1933 when we went to press.

(2) The Midland Valley was incorporated in 1903, completed in 1906. In 1929 it acquired the Wichita & Midland Valley, and in 1926 consolidated operations with the Kansas, Oklahoma & Gulf. It has 363 miles of main track, 17 locomotives, 60 freight, 11 passenger and 57 miscellaneous cars. It extends between Wichita, Kan., and Fort Smith, Ark., with branches from Rock Island, Okla., to Greenwood and Hartford, Ark., and from Jenks to Glencool, Okla. In 1930 net operating income was $837,307; net income, $594,124. In 1931 net operating income was $516,854; net income, $214,535. In 1932 net operating income was $432,058; net income, $26,925. Its road and equipment are valued at $20,050,989; total assets are $22,827,713.

H. W. S., Benson, Minn.—Both the Milwaukee's "Olympian" and the Great Northern's "Empire Builder" make exactly the same time between Chicago and St. Paul and Seattle; both have the same equipment; both travel practically the same mileage. Thus it would be untrue to say that either gives better service.

(2) Great Northern 2575 series, 4-8-4 type, are more powerful than the Milwaukee's 4-6-4 types. The former exert 58,300 lbs. t. f.; the latter, 45,822.

SOMETIMES in your stories the dispatcher will call a station and say, "19 copy 5," or "31 copy 3." What does the copy number mean?—J. R., Santa Barbara, Calif.

It means that the operator must make 5 copies of the "19" type order or 3 copies of the "31" type order, etc.

WILL a washout or any obstruction on the rails other than cars or trains cause an automatic block signal to show danger, thus stopping the train?

(2) *What are the lowest and highest engine numbers of the SP?*—M. M., Rodeo, Calif.

(1) Automatic block signals work only when both rails of a track are connected sufficiently to cause a current from a track battery to flow from one rail to the other, thus completing a circuit. The wheels and axles of the engines and cars act as this connection. A track washout or any other obstruction, unless it connects the two rails, would not cause the signal to indicate danger.

(2) We hope to print a roster of the SP in a future issue.

A. F.—The new locomotives of the Boston & Maine are Classes P-4a and R-1a. The former, 4-6-2 type, Nos. 3710-3714, have 23 x 28 cylinders, 80-in. drivers, 260 lbs. pressure, weigh 336,000 lbs. without tender, exert 40,918 lbs. t. f. —with booster, 52,818. The latter, 4-8-2 type, Nos. 4100-4104, have 28 x 31 cylinders, 73-in. drivers, 240 lbs. pressure, weigh 409,000 lbs., exert 67,918 lbs. t. f.

WHAT make of watch do railroad men prefer?—C. L. C., Malone, N. Y.

(2) *What are the requirements for a railroad watch?*—G. L., Troy, N. Y.

(1) Nobody has ever taken the trouble to get statistics on this question, and even if somebody had, they would not necessarily prove that one make is better than another. It is our belief that you get what you pay for in a good watch, and that while one make may have certain slight advantages over others, the others have advantages in different respects.

(2) American Railroad watches must be American-made, have 19 jewels, a double roller, steel escape wheel, lever set, 5 positions, Arabic dial, must be adjusted to temperature, and must wind at the figure 12.

R. D. H., San Marino, Calif.—Here is additional information about the Nevada County Narrow Gage, sent in by D. L. Joslyn, 2164 Castro Way, Sacramento, Calif.: No. 5, 2-6-0 type, was built by Baldwin in 1875. At present only Nos. 8 and 9 are in service. The former was 2-8-0 type and was previously D&RGW No. 183, built by Baldwin in 1883. The latter is the same type, was formerly No. 14 of the Nevada, California & Oregon RR., was built by Baldwin in 1914. Nos. 5 and 7 are now out of service, while Nos. 1 and 2 are on the dumps. Mr. Joslyn has several good photos of these engines.

The Boomers' Corner

CAN anyone help to locate my son, Samuel Earl Reid? Sam is 35 years old, 5 ft. 10 inches in height, dark hair, blue eyes, weight about 175 lbs., has left hand cut off at wrist, does not wear a hat. Left Roanoke, Va., April 29, 1927. Last heard from Dec. 27, 1927, from Los Angeles.

I am a conductor on the Virginian Ry., member of the O. R. C., Div. 261. Have been a home guard for 27 yrs., but began as a boomer. The Editor asked for the dope on my career, so here goes:

Born Aug. 9, 1879, in a log cabin near Cheraw, S. C. First job was telegraph messenger boy, then clerked in a general store, and became "printer's devil" for the publisher of a country newspaper at $5 a month. Even at that, the publisher kept falling behind in my salary, and one month gave me a pig instead of money. Later I became machinist in a knitting mill.

At 17 I had my first glimpse of the ocean when I went to Norfolk and an engineer on the narrow-gage Norfolk & Va. Beach R. R. gave me a free ride. Then and there I was bitten by the railroad bug. I wiped engines as pastime, and in 1898 I got a job braking on the Norfolk, Va. Beach & Southern.

Later I was yard brakeman on the N. & W. I got on fine, until one day I walked backward off the top of a box car while giving signals, and fell on the front of the engine, almost in the smokestack. Fortunately I was more scared than hurt. Eventually I was promoted to yard conductor, getting $2.30 for 12 hrs. work. On the strength of this huge income I got married.

One night we were weighing up a local train on the track scales. While kicking a cut of cars, the dressed lumber in a box car shot through the end of the car, tearing out an ugly hole. Well, we were "on the carpet" for investigation. One of my brakemen lost his nerve and did not stick to the story we had agreed upon. The next night when I went to work I received a nice little note saying:

"In view of the facts relative to the damage to P. C. C. & St. L. No. 2686, which showed conclusively that you did not exercise proper care, effective this date we will discontinue your service as conductor in charge of engine but you will be allowed your standing as brakeman."

I swallowed this medicine, but later I was called up in another investigation for a similar accident, and as the super started getting rough with me I told him what to do with his job, and I pulled the pin, and wandered about the country. For a while I was extra brakeman on the P. & L. E., then yard brakeman on the Erie and P. & L. E. Going to the C. L. & W. yards at Lorain, O., two other boomers and I saw several cars broken up in a sideswiping accident and some brakemen with hands tied up or limping on crutches. We asked the yardmaster for jobs. He said:

"You fellows stick around here until noon. By that time some more brakemen might get killed or crippled, and then I can fix you up."

My two pals looked at me, I looked at them, and we all three said: "Nothing doing, mister." We decided it wouldn't be healthy to get a job there, so we went to Cleveland.

After that I wandered around some more, and was braking on the Norfolk & Portsmouth Belt Line at Norfolk for 9 months. Then I broke on the Southern from Nov., 1901, until Dec., 1903, when I was promoted to conductor. In June, 1907, I pulled the pin again and became a conductor on the Virginian. Then I wrote to the supt. of Florida East Coast Ry., applying for a job down there, as winter business was pretty good. He telegraphed in reply:

"If you are not over 45 yrs. old and do not weigh less than 170 lbs., can pass physical exam, and have had 5 yrs. experience as conductor, report at St. Augustine, Fla., soon as possible."

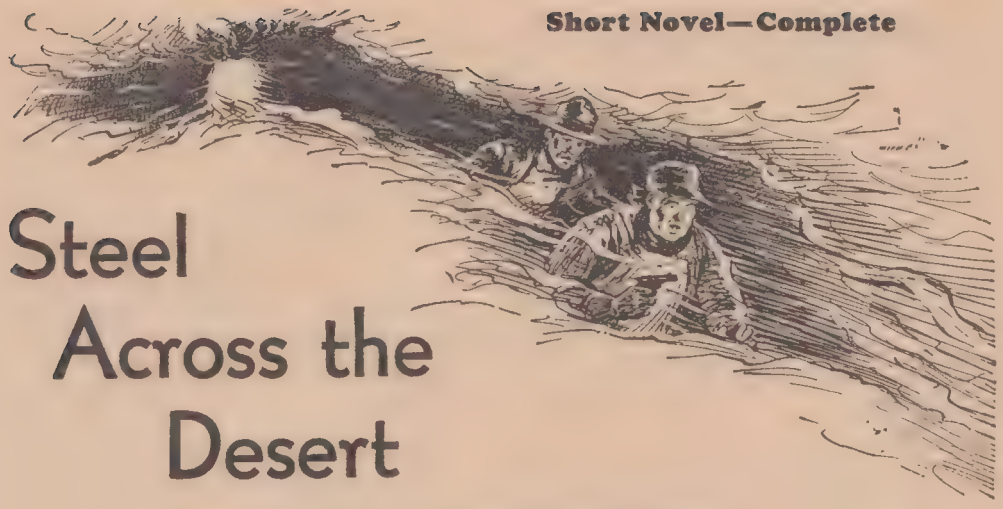
I got a pass and left on the next train. They gave me the job, first on the extension then being built between Homestead and Knights Key dock, then a passenger run for about 20 days, and then in freight service. I was shifted around some more. Finally I got tired of the mosquitoes, drew my time, and went back to Norfolk. Have been working for the Virginian ever since.—E. L. REID, 308 Janette Ave. S. W., Roanoke, Va.

* * *

WHILE in Colorado recently I ran onto the old roundhouse of the Denver, Laramie & Northwestern, now being used as junk warehouse. Tracks are overgrown with weeds. Old locomotives are rusting away on the lead. Three were in a fire and a mass of rust with no cabs. The other, a 4-4-0 type, is in a fair state of preservation. She was formerly a U. P. 200 class. The D. L. & N. W. was started in 1909, completed 54 miles from Denver to Greely in 1910, abandoned in 1916, and sold for junk in 1917.

I drove 35 miles through Phantom Canyon from Canyon City to Victor, over the old roadbed of the Florence & Cripple Creek R. R. This pike, built in 1894, was abandoned in 1915 and tracks torn up. The auto road follows the F. & C. C. right-of-way the entire distance of Phantom Canyon, except for a few places where it was necessary to detour around a bridge that had been washed out or torn down. Most of the railroad bridges have had planks nailed on top of the ties and are used for the auto travel.

In Colorado Springs I found 3 engines of another almost forgotten pike, the Colorado Springs & Cripple Creek District Ry. These old locomotives are stored in a shed that at one time was part of their machine shops, all that is left of a once well-known railroad! I desire to exchange information on old Colorado roads.—J. A. GROW, 135 E. Madison, Rushville, Ill.



Steel Across the Desert

By E. S. DELLINGER

Author of "Old Hell Bender," etc.

"This Job's Goin' to Take a Guy with a Silver Spoon in His Mouth an' a Rabbit's Foot in Both Pockets!"

IT was ten minutes before midnight. Brick Donley was striding down the flower-bordered walk toward the office building in the S.T. & S.F. terminal of Costilla.

A frown was on his freckled face, and a look of wonderment in his keen blue eyes. No one knew better than he that when a brass hat sends a call boy to rout a brakeman out of bed at midnight, and no train is ordered, there's a good reason.

He turned down the carpeted corridor to the division superintendent's suite. The waiting room was in darkness. In the den a bright light burned under a green shade, and the door was ajar. He halted in the shadows. Two men were leaning over the mahogany desk, scanning an outspread parchment which covered more than half of it. One of them he recognized as Paddy Burns, the super of the Mountain Division. The other— He gave a start of surprise. He had not known that Old Hell Bender, president of the S.T. & S.F., was in town.

They were talking in low, concerned voices. At sound of the closing door they hushed and Burns turned to peer into the shadows.

"Is that you, Donley?" he asked guardedly.

"Yes, sir."

"Come right in. We're waiting for you."

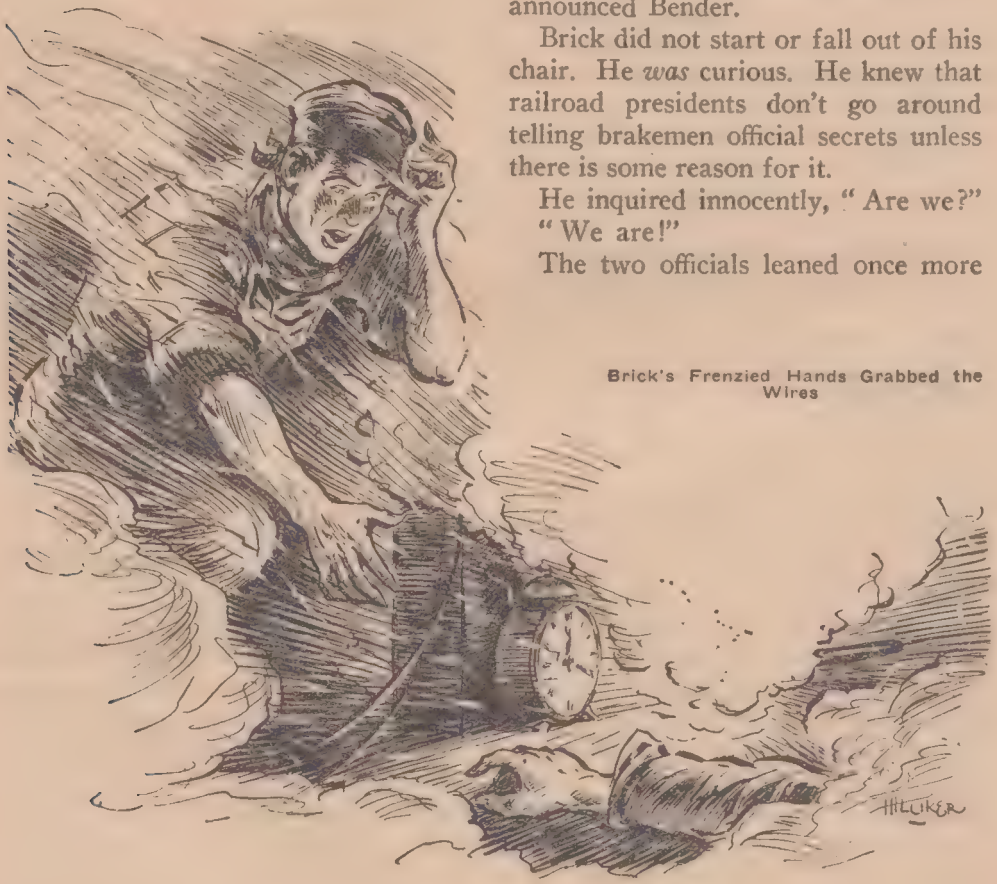
The young red-headed brakeman obeyed. He was not accustomed to hobnobbing with brass hats. Old Hell came forward to meet him.

"You ain't been getting killed in wrecks or burned up in new fires, eh, boy?" the president asked with a hearty chuckle.

Brick flushed. A few weeks ago, he had sawed Old Hell's daughter out of a burning bus where she had been

cooped up when the bus staged a prize fight with a freight train on Kneehi crossing.

"No—no, sir!" he said, in some embarrassment. Brick wondered if Old Hell had called him out of bed to give



Brick's Frenzied Hands Grabbed the Wires

him another medal or something.

Old Hell hadn't. Almost before the echoes of nervous laughter had ceased through deserted halls, Bender turned his keen eyes upon him.

"You've heard of the Sandburr Cutoff, Donley?" the official demanded.

Brick grinned. Everybody had heard of the Sandburr Cutoff. It had been a joke for twenty years. For that length of time, it had been "going to be built." Real estate sharks over a two hundred mile strip of rattlesnake range and jackrabbit pasture had been peddling two-dollar an acre townsites to eastern gullibles at fifty dollars a lot.

"Yes, sir," he said respectfully.

"We're going to build it this year," announced Bender.

Brick did not start or fall out of his chair. He *was* curious. He knew that railroad presidents don't go around telling brakemen official secrets unless there is some reason for it.

He inquired innocently, "Are we?"

"We are!"

The two officials leaned once more over the table. On it was a map of the system, with the existing lines done in black, rival lines in blue, and a streak of red beginning at a point 200 miles east of the mountains, and ending at Weller, 50 miles southwest of Costilla.

OLD Hell laid a friendly hand on Brick's shoulder, and tracing out the black lines and the red, explained

in words of one syllable why the original construction had arched northwest from Wind City to go around the Sandburr Barrens, and had arched southwest to go around some mountains, forming a bent bow, 350 miles long.

"The proposed Sandburr Cutoff is the string of that bow," he said impressively, "and the time has come to tie the string, or face ruin through air and highway competition.

"I've promised my directorate," he concluded, "to have this cutoff built and in operation in time for the fruit and vegetable movement out of California next spring. If I fail it means ruin to me and my railroad, and the men who work on it; and it means victory and millions for the Motor Transit Company.

"They ain't going to let these millions slip through their fingers without putting up a fight. Flint Rockey's back of that Transit gang. He's been on my directorate for the last ten years He's fought *with* me, and he's fought *against* me. I know him too well. He's one of the slickest, dirtiest scrappers I've ever met in a lifetime fighting dirty scrappers. He won't stop at anything short of murder, and I'm not sure he'd stop at that.

"He commenced to fight the minute he knew we were going to build. He fought it through the Board and through the Comish. He got licked. Right now he's somewhere, organizing to scrap us when we start construction. When our contractors begin work, he'll have his henchmen in their camps, roughnecks whose job it is to balk and block. There's where you come in. Understand?"

"But I ain't no railroad bull, Mr. Bender."

"If you was a railroad bull, you wouldn't be here now. You wouldn't be worth two whoops in hell in this scrap. Flint Rockey's got the lowdown on every railroad bull between Mexico and Canada. If one of 'em shows up on this job, he's goin' to be filed and carded before he can turn around. Your good work in handling that deal at Balanced Rock—"

"Luck, Mr. Bender! Pure damn—why, I jist stumbled into Moss Fenton."

"It's goin' to take luck on this job, too, boy! It's goin' to take a guy like you, born with a silver spoon in his mouth an' a rabbit's foot in both pockets to head off the bunch uh slickers Old Flint Rockey picks to keep us from building this railroad through in time to take his fruit and vegetable business away from the damn blood-sucking outfit he's backing."

Brick said no more. Bender, accepting silence for consent, rubbed his thin hands and continued:

"Now here's the lay, Donley. The company's furnishing contractors with rolling stock and men to handle it. Mr. Burns and I have gone over the whole thing. We figure the gang ain't going to fool around our two hundred miles of prairie construction. They're going to do their dirt right here in this Salt Creek segment where we've got a lot of trestle work, and heavy fills, and deep cuts, and short tunnels. That's where they're going to strike, because the rest of it will be done and ready by the first of January. We want you to take a job braking on the construction train."

"But I ain't got the seniority."

"Never mind the seniority part. We'll manage that. We want you to work on a construction train in the Salt Creek segment. Filter around among the men, and keep your eyes

peeled and your ears picked. If you see or hear anything suspicious, let us know. If you don't—well, you don't. Will you take it?"

"That's all there is to it?"

"Absolutely. You get a berth on work train. We'll all pray nothing happens."

WHILE Brick Donley was in conference with the President of the S.T. & S.F. in the Costilla office, Flint Rockey was reclining in an easy chair in the Biltmore Hotel's best suite. Rockey was a little man. His skin drawn tightly over a wizened frame—yellow skin which looked like old parchment—and his big blue eyes which seemed to have neither lids nor lashes. He fingered a yellow message slip, smoothed imaginary hair from a scalp bare as an ostrich egg, looked impatiently at a gold watch, and slipped it back into his vest pocket.

The room telephone rang. Flint Rockey reached a skinny hand for it, held the receiver to his ear.

"Yes!" His high-pitched voice was petulant. "Ellers? Show him right up. He's late already."

Somewhere an elevator door opened and closed; and a moment later a bellboy ushered in a stranger.

He was a young man, this stranger, little if any older than Brick Donley, the young red-head who was at that moment hobnobbing with brass hats in the Costilla office. His eyes were black and glittering, as if the fires of hate were raging just behind them, and they were set in circled, sunken sockets, with a pointed nose outthrust between them.

"Are you Mr. Elton Ellers?" queried Rockey.

"Yes, sir."

"Civil engineer, I believe, employed at present in the highway department of—" He named a midwestern state.

Young Ellers nodded. He wondered how this stranger knew these things, why he had been called here for this conference with expenses paid.

"I understand you—ah—love the S.T. & S.F. Railway, Mr. Ellers?" Rockey watched closely the effect. Ellers' eyes grew fiercer. His lean jaws squared.

"Love them! I *hate* them! I hate every damned wheel that rolls for them! Every rail it rolls upon!"

He broke off. Rockey smiled.

"Don't get worked up about it, sir," he soothed. "I wanted to be sure we understood each other."

ROCKEY extended a case of cigarettes. Long quivering fingers reached for one and lighted it with a silver lighter.

"Case of right-of-way, I believe."

"How did you know?" Ellers asked.

"I make it my business to know things like that, Mr. Ellers. Am I right?"

"Yes, sir! The crooks ruined my father's farm with their damnable railroad. They refused to pay the damage. My father fought them through the courts, fought them to his grave, and died in poverty."

Flint Rockey lifted a restraining hand.

"Control yourself, boy!" he urged.

"Would you like to—ah—do something real nice for this railway? Something, which, say, will even the score and at the same time restore to yourself the damage which they denied to your father?"

"You mean, would I like to get revenge on them?"

"Revenge is a bad word. Let us say, rather, repay the kindness they bestowed in kind."

Ellers sat a moment staring into Rockey's lidless eyes.

"What is it?" he breathed at last.

"Would you do it?"

"I'll do anything!"

Rockey rubbed his hands. For thirty minutes he gave terse, vivid instructions.

"Use your head," he concluded. "Don't get caught! Don't connect me or my company in any way with what you do. Help the contractors in Salt Valley finish that railroad *after* June fifteenth. And on Independence Day meet me here to collect two thousand."

"Goofy" EHers

THROUGHOUT the dry hot summer Brick Donley and Slim Wiggins were on the job. They ran the work train by day, laying rail and hauling supplies from Weller over the ever-lengthening threads of steel.

By night they filtered among the men in camp. They listened to the ukes and the banjos, and the guitars, as builders sang in the twilight or strummed in the light of the midnight moon. They danced with painted damsels. They played a little poker. They shot a "few" dice.

They had gone down to Pete Lopez' place the night hell started popping. The place was a hastily constructed, barn-like affair with rough board walls and lineoleum covered floors. To the left was the cold drink fountain, where a pretty Mexican girl served pop and ice cream. To the right and back were tables for billiards, dice, and poker; and behind the thin partition were dim-lit regions where men might find whisky and whatever else for which they had the price.

Slim took a cue at billiards with the work train conductor. Brick sauntered back toward the rear, watching, listening, talking among the crowd.

At one of the poker tables a lone man was shuffling the cards and dealing them with long nervous fingers. It was "Goofy" Ellers, engineer in charge of the checkup work on the Salt Creek contract. As Brick came by the table Ellers lifted his burning eyes and gave a nod of recognition.

Brick returned the nod. Already they had met several times at dice and poker. The khaki clad engineer, with his odor of oriental perfume, was good at both.

"How about a little game of two-hand tonight, brakie?" he queried in his deep, hollow tones.

Brick hesitated. So far, he had never proved lucky when he played with "Goofy." Nothing crooked at all. He just never held the cards, and Goofy did.

"O.K. by me, Goof—I mean Ellers."

The engineer winced, and his burning eyes brightened. It was Brick Donley who had first seen possibilities, and given him the nickname. He still resented it.

They played in silence. Ellers kept looking at the wrist watch with the luminous dial. After a while Pete Lopez, the smooth-spoken, paunchy proprietor, came by the table. He said nothing. The two men exchanged quick glances. When the hand was played, Ellers excused himself and disappeared behind the partition, and Lopez soon followed. Neither of them showed up again during the evening.

At a quarter of twelve Brick and Slim left and started toward the

caboose, which they used for a bedroom.

Midnight. No moon. No stars. September fog seeping down the canyon, wrapping the construction camp in its chilly blanket.

With even stride, they passed khaki tents and rough board shanties, which lay silent save when the resonant snore of tired workmen and the echo of drunken laughter from the pool hall broke the stillness. Their feet crunched over the fresh gravel.

"Begins to look like Ol' Hell jist naturally had a case uh jitters that night he called yuh in an' sent yuh down here to pussy-foot around huntin' trouble," Slim said disconsolately. Slim never liked to fail at anything, even finding trouble.

"Yeah." Brick himself was not too happy and contented. "Worst deviltry this gang seems able to hatch up's shootin' educated dice, an' playin' crooked poker, an' peddlin' hooch."

Slim chuckled. "Git cleaned for much tonight?"

They came to the end of the string of empties in the long track. Brick found the grabiron of the caboose, swung up the rear platform. "Four bucks, maybe a little over. I'm goin' to charge the whole damn thing up to Ol' Hell Bender an' make him—"

BRICK jerked erect. From the darkness of the east, toward the end of the steel, came one loud, piercing scream. It was a woman's scream. It ended almost before it had begun, as if a fist had suddenly been thrust into her open mouth to check the utterance.

Brick whirled to peer back into the darkness.

"What was that, Slim?" he whispered.

"Some damn Mex girl out—"

Brick dropped the key into his pocket, brushed past Slim, and hit the grade.

"Come on, guy!" he said tensely. "We gotta see."

"In a pig's eye!" barked Slim. "Yuh go meddlin' around with these here love affairs an' yuh'll stop six inches uh steel between the shoulder blades. Come on back here!"

But Brick did not come back. Already he was fifty yards away, stumbling through the blackness, feeling for railway ties and taking them four at a stride.

Slim remained for only a moment by the platform. He knew Brick Donley. He turned from the caboose and stumbled after.

Brick raced on through the darkness. He approached a trestle over a dry wash coming down from the south. He heard the sounds of a struggle. In the blackness on his left there were blows and curses and the tearing of cloth and feet gouging in dry sand and breath coming in short, choking gasps.

For an instant he hesitated. It was dark. He did not know who was there, nor how many, nor why they fought. He listened. Down the track Slim Wiggins was lumbering along. Brick edged off the trestle and dropped to the sand. Evidently his approach had not been heard. He left the tracks and stumbled toward the combatants.

He was moving guardedly now, expectantly, as if from out the darkness some shape might spring upon him. As he eased forward the odor of pine oil smote his nostrils. And by the sounds he knew the combatants were two—a woman and a man.

In his mind was no question which side he should take. He plunged in. His right hand brushed silk. The odor

of pine oil grew stronger. His left found woolens, and the odor of liquored breath mingled with the pine. His left hand closed. The right came in to meet it.

"What's going on here?" he barked viciously.

There was instant silence. As if a bomb had blown and stricken them down, the combatants ceased to struggle. The figure beneath Brick's clutch stiffened. He expected an instant plunge, perhaps a knife between the ribs, but no knife was there. For two seconds, maybe three, there was neither sound nor movement. Then, like a bolt from the sky, the man jerked loose. A huge body hurtled past him, and went dashing up the wash toward the rimrock.

AS the man fled Brick felt the body of the woman easing slowly toward him. She touched his hand, his arm. Her own hand trembled fearfully.

"Thank you—my frien'," she whispered in an accent which there could be no mistaking. That was all. She broke out sobbing. Brick put his arm about her waist and she wilted into it.

By this time Slim Wiggins came panting through the darkness.

"Brick!" he called. "Brick! Where are yuh?"

"Here. Yuh got any matches?"

"Not a one."

Slim came stumbling to his partner.

"Who was it?" he queried.

"Damfino," muttered Brick. "I've got 'er here. I think she's fainted."

The girl did not stay out long. She snapped awake with a start.

"Eddie!" she whispered. Then louder: "Eddie! Where—"

A groan sounded from beneath the the culvert. Still holding the little señorita in his right arm, Brick went with Slim toward the direction of the sound. Halfway to the culvert he sniffed the tainted air.

"Do—do you smell what I do?" He asked in a low tone.

"What?" Slim asked shortly.

"Goofy—Goofy Ellers!"

Brick felt the girl stiffen in his arms. Slim sniffed.

"I don't smell nothing," he said.

The engineer stumbled over a prostrate figure. There came another groan. Slim dropped to his knees and groped in the sand. Brick struck a match and held it down. At the foot of the culvert lay a Spanish youth clad in the uniform of the engineering service. He was beginning to writhe and twist.

Brick felt through pockets for another match. He had none. The girl slipped from his arms and dropped down beside the injured youth.

"Are you—are you hurt, Eddie?" she quavered. "Eddie, *mi querido*—"

"Nu-no!" the youth replied thickly. "I—" His voice trailed off, muttering in his native tongue.

Brick and Slim lifted him to his feet. His knees wobbled until he could scarcely stand. They walked him around in the sand. Presently he was able to stand with one to support him.

"We'd better git him back to the crummy an' see how bad he's hurt," advised Slim.

"All right. Let's get goin'."

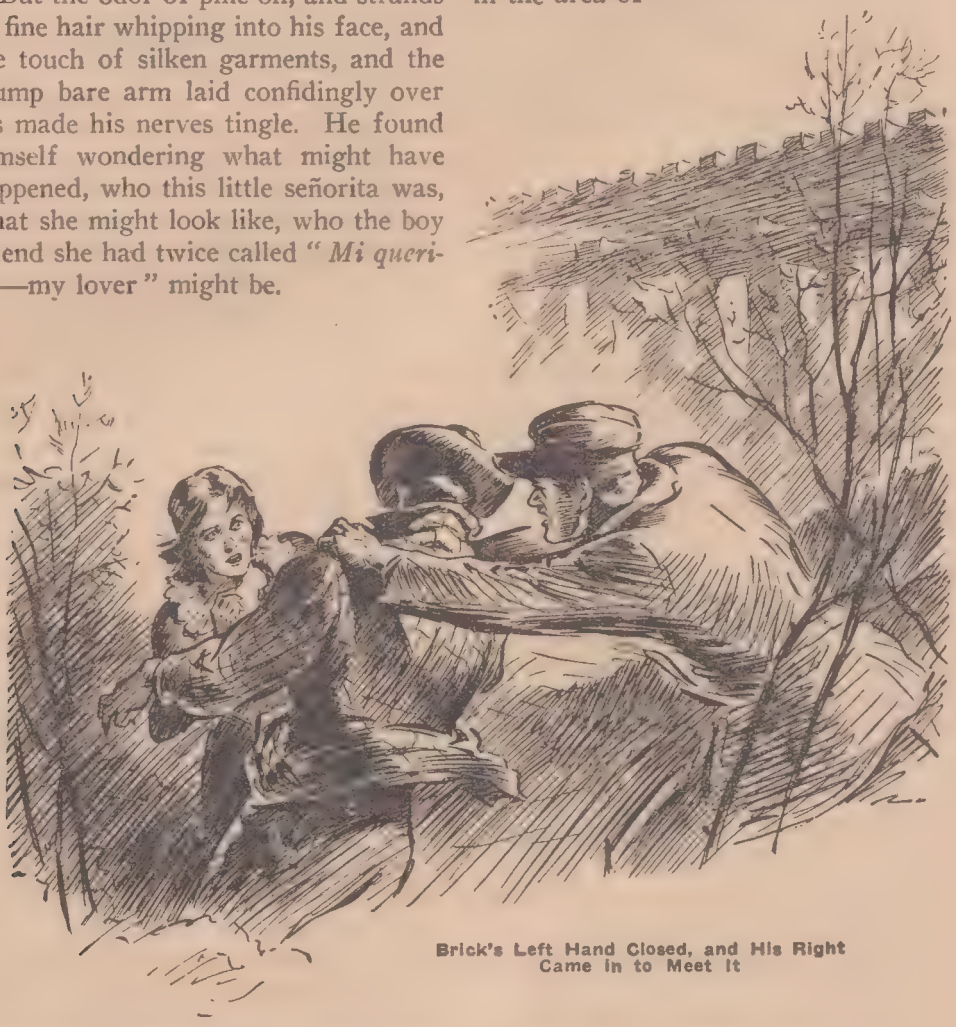
The youth recovered rapidly. Slim led him up the embankment. Brick turned to the girl. She was groping in the darkness. He took her by the arm. On the grade she stumbled, almost fell. Brick put his right arm about her plump waist.

He had never been woman crazy. Since Mary Haner had let him down a

few months ago and married a truck driver he had become almost a woman hater.

But the odor of pine oil, and strands of fine hair whipping into his face, and the touch of silken garments, and the plump bare arm laid confidingly over his made his nerves tingle. He found himself wondering what might have happened, who this little señorita was, what she might look like, who the boy friend she had twice called "*Mi querido*—my lover" might be.

In the light he recognized him as a chap he had seen carrying tape and transit in the engineering work around in the area of



Brick's Left Hand Closed, and His Right Came in to Meet It

HE was still wondering when they crossed the switch and brought up behind the caboose. Releasing the girl, he swung up the step, unlocked the door, and lighted the lamp.

In its dim light the strangers appraised each other. Slim wore denim overclothes, neatly starched and ironed. Brick wore a blue flannel shirt and serge trousers. He looked quickly at the boy.

construction. He was not seriously injured—a black eye, a skinned nose, a knot on his head the size of a hen's egg. He would probably not lose even a day.

Brick had already given the girl a furtive glance. Her face also was familiar around the camp. He did not know who she was, but he had seen her at the dances and around the restaurants. He had often mentally re-

marked that she was a "neat little gal."

Now her makeup was wrecked, her permanent with the pine oil was disheveled, and the cheap silk dress and the slip below looked almost as if they had gone through a threshing machine. Slim eased the boy to the cushions, while Brick brought a pan of hot water from the pail on the stove.

"Maybe we ought to know each other," he said, dropping a sidelong glance at the girl, who was now straightening her hair. "I'm Brick Donley, brakeman on the work train, and this is Slim Wiggins, engineer."

"We are ver' pleased to meet you, Mr. Donley, and you, Mr. Wiggins," the girl said quaintly. "This is my frien', Eddie Sandoval. He is assistant to Mr. Ellers. I am Rosa Garcia. I work in Mr. Eller's office."

"Goofy Ellers?" Brick blurted out the exclamation before he thought.

She laughed lightly. "Yes. Somebody call him Goofy. I think—" She bit her lip and hushed. Brick wondered what she thought.

"What on earth were you doin' up there, anyhow?" asked Brick.

Rosa blushed. Eddie did, too.

"Why, you see," he began, with an appealing look at her.

"We were—" she continued, with a frightened look at him.

"Yuh oughtn't to ask such embarrassin' questions, Brick," remonstrated Slim.

"I beg your pardon," muttered Brick, his own face flushing. "I didn't mean it exactly that way. What I wanted to know was how did the fight start, and who was the guy that caused it."

"I do not know," Eddie answered haltingly. "Rosa and I were sitting on the bridge, and somebody came down the track. There were two of them. They stumbled over us. The fight started."

Brick nodded. He was not too thoroughly convinced as to what might or might not have happened.

"Don't you know who they were or have any idea?"

The girl looked startled. Brick recalled how she had acted when he had mentioned the name of Goofy Ellers. He remembered also that Goofy had left the poker game two hours ago.

"No, sir," she said. "Not the leas' idea. You see, it was so dark."

It was now almost one. Rosa declared she must go. Brick and Slim offered to accompany them to the pine board shack down near the pool hall where Mrs. Garcia made a home for her daughter and some other Spanish youngsters employed on the construction.

They graciously declined, declaring they had already caused too much trouble. Brick lighted a lantern for them, told Eddie to return it to the caboose in the morning. With profuse thanks they went away, leaving the two trainmen alone in their caboose.

"You've sure played hell now," grumbled Slim.

"How so?" queried Brick.

"Oh, git sent out by the president of a railroad to hunt fer villyans an' run smack dab into a love affair."

"She's sure a keen-lookin' little dame, anyhow."

"Yeah," scoffed Slim. "Got stuck on her, didncha? First thing yuh know yuh'll be runnin' around with her. Either that or stoppin' a knife blade."

"Don't repeat it, Slim," Brick said seriously. "It don't sound encouragin'."

They went to bed, unaware that they had "stumbled" into the very mess for

which they had been sent by Bender into Salt Creek Canyon!

"Too Damn Bad for the Train"

SALT CREEK had once been a considerable stream. It had come down from the mountains to the north, struck a fissure in the lava bed which was Black Horse Mesa. Then it had followed that fissure for twenty miles through Salt Creek Canyon, emerged at the plains, and wandered southward over the flats.

Above the turn where the river poured into the fissure was an enormous basin. Below the basin a two-hundred-foot dam had been flung across the canyon, backing into the basin a lake holding a quarter million acres of water.

At the head of the canyon the east-west fissure pinched out, closed by a north-south deposit of malpais rock, underlaid with a thirty foot stratum of soft shale. A scant half-mile through this ridge the fissure reopened as Sugar Creek Canyon, which led straight east to the prairies.

It was this fissure which had determined the route of the Sandburr Cut-off. Even before the Salt Creek Dam had been built, the route had been charted, and a tunnel dug through so as not to disturb the dam with the blasting. For twenty years this tunnel had stood a mute prophecy of a railroad somebody would drive straight toward the west coast.

From the dam to Cedar Gulch the roadbed had to be run on a man-made ledge along the cliff wall. Woodson, the boss contractor, had long ago brought up steam shovels, blasted out footing for them, raised them to the ledge, and started them working at intervals throughout the hard construction.

The morning following Brick's meeting with Rosa and Eddie, one of these shovel crews went to work as usual. When they came to the place where their machine should be, it was not there. It was in the canyon thirty feet below, a total wreck.

They called Woodson. The boss contractor came up frothing at the mouth.

"Didn't I tell you fellows to block this outfit every night so it wouldn't get away?" he stormed.

"We did block it," the operator declared.

"Like hell you did! If you'd blocked it like it oughta been, the little wind we had last night wouldn't 'a' blowed it over this dump."

Woodson was an iron boss. He had often boasted no man could make two mistakes on a job he was running. He fired the crew. They rode the caboose into Weller that morning. Plenty sore, they told Brick and the conductor what had happened.

"We blocked his damn machine for him," they declared. "We always blocked it."

"What yuh figger happened?" Brick asked.

"I dunno. I know it never got away from where we left it without bein' tampered with. Either somebody run it off that ledge or else they took the piece of crosstie out an' let it roll in."

Brick remembered why he was holding the work train job in Salt Creek Canyon.

"Does it mean much of a tie-up to this job?" he queried.

"I'll say! It took four days to git the damn thing on the ledge. It'll take

a week to git another on the ground, an' four days more to git it back. A few tie-ups like that an' the old man'll either have to give up the job or buy all the shovels in the country to finish it in time."

BRICK went to the engine and talked to Slim.

"Looks like maybe Old Hell was right in guessin' there was trouble ridin' the iron on this job," he said. Then he repeated what had happened in the canyon. "Reckon there might be a hookup between that an' the two guys pussyfootin' it down the track last night?"

"Your guess is as good as mine," Slim drawled.

They clanked along for several miles. The canyon was behind them. "What yuh goin' to do about it?" Slim finally asked.

"I dunno. Reckon we ought to bother Bender with it?"

"Naw. Woodson'll report the thing."

"Yeah. But Woodson won't tell him who was in the canyon last night."

"You can't, either."

"I can guess mighty close."

Brick did not report the affair to the railroad authorities, because he had only a lean suspicion. He did mention it to the boss contractor. Woodson rode up the canyon that night on the caboose. He often rode with the crew. Brick said something about the steam shovel.

"Reckon somebody done it?" he queried.

"Naw. Jist a couple careless birds forgot to block it."

"You knew there was somebody up there last night?"

"Was there?"

"Sure!" Brick told him about the cry in the canyon, and two men who had attacked a Spanish stenographer and her beau.

"I never heard about that," Woodson declared.

"They wouldn't report it," Brick assured him.

"That probably didn't have anything to do with my steam shovel."

"Maybe not." Brick watched the walls of the canyon deepen. He turned to the boss with the quick question, "Who is this guy Ellers?"

"Ellers? Oh, he's just a damn good engineer."

"What do you know about him?"

Woodson eyed Brick as if he would like to say it was none of a brakeman's business who he was.

"All I know is, he's onto his job, and tends to his own business, and not half as goofy as some smart boys think."

Brick flushed and said, "Oh!"

The contractor climbed out of the cupola, indicating the subject was closed. It opened before many days had passed.

SALT CREEK Construction Camp had been located seven miles above the canyon mouth. Three miles above it Cedar Gulch came in from the north through another fissure in the malpais. In the long dry season its bed was harmless.

In flood it became a quagmire of treacherous quicksands.

The specified bridge for this gulch was a plate girder affair on concrete piers set to the shallow bed rock. The bridge was in, and they were working on the approaches, which were to be temporary structures made by driving pilings into the sand.

A few days after the destruction of the steam shovel, the work train came

breezing up the valley. Slim Wiggins leaned on his padded arm rest, whistling. Ahead of him were cars of creosoted pilings. He watched the cars as they swayed over the new track.

Standing on the head car, Brick Donley moved with the rhythm of its sway. His hands were clasped behind his back. His red necktie flapped back in the wind.

The train ran up Salt Creek as if it were going through. Lounging camp followers and white-clad waitresses in front of the rough board "Café" waved Brick a greeting. He answered.

As his car passed the project engineer's office, Goofy Ellers came bursting out, running toward the track, waving a frantic stop sign. Figuring the engineer wanted to ride up the line on the work train, Brick touched the right palm to the left elbow, signal that they were going to "pull up and back in."

Goofy apparently did not understand the signals. His thin face went purple. He jerked off a cap and waved it frantically; and when Brick went out of sight, Goofy was swearing until heaven itself rang with the tirade.

Slim did not heed the signal. He merely repeated the one Brick had given, and shoved his cars right on by. After they had switched their feed and commissary into the house track, they backed down to the station. They did not pick up the caboose. Ellers was raging up and down the platform.

"Can't you see a signal?" he raved.

"Sure we can," Slim answered.

"Didn't I give you a stop sign? Didn't I?"

"And didn't me an' the brakeman both tell yuh we was goin' to pull up an' back in? Didn't we?"

"I'm goin' to turn you fellows in an'—"

"Goosewhiskers! Run on an' tell the teacher, Goofy," Brick replied.

Goofy spun on his heel and made for the head car of piling. He perched here for the ride up the canyon. Soon they pulled away.

Passing the office, Brick saw a little señorita standing in the open door. He lifted a hand in friendly greeting. She smiled and waved an answer. Ellers glowered up at him.

WHEN the train stopped at Cedar Gulch Brick went to watch the pile driver. The sand was dry. The timbers went in slowly, almost imperceptibly through the tight formation. Yesterday they'd had a force pump sending a jet of water down alongside the piling, but the pump had broken and they were now forcing them in through the dry sand.

The timbers were twelve feet long. They had to be driven seven feet to bed rock. If they were not driven far enough the bridge would flop sidewise. If the hammer kept pounding them after their points hit bed rock it would "broom" the head of the piling and ruin it.

To gage the depth the engineering force had set up a transit. Eddie Sandoval was handling it. As the two-thousand pound hammer staved a timber down toward its proper depth, the rodman would set a level rod on its head. Eddie would take a reading and give directions.

It was a job requiring discrimination—too little depth would ruin the bridge, too much, the piling. Besides running the instrument he kept a good eye on the hammer, watching the rebound, for in places the bed rock lay in waves. It took two eyes, two ears and plenty between them.

Brick went to where Eddie was working. The youth greeted him.

"*Como esta?*" he queried.

"*Bueno!*" Brick answered. "How's the old bean?"

"The bean? Oh!" Eddie laughed and rubbed a hand over his pump knot. "O.K., Mr. Donley."

"Any idea who give it to yuh?"

"No."

Eddie's eyes went swiftly to the hammer. Brick was not certain. Some of those boys didn't tell everything they knew.

Eddie watched the hammer fall fourteen strokes a minute. He lifted his hand. The weight hung poised. A rodman set the marked stick on the head of it. Eddie gave a signal. A rodman stepped back. The hammer dropped again — twice — three times — four. Brick thought he detected a slight change in the sound. Eddie lifted his hand again. The machine moved on to the next piling, and commenced anew.

Ellers had come to stand beside them. His eyes were burning. He elbowed Eddie away from the instrument.

"I'll take it," he said shortly.

In a few terse sentences he dispatched the young Spanish boy up the canyon with a message to another crew working on a grade. He himself took charge of the gaging.

Brick returned to the engine. They remained at the end of the grade while workmen unloaded three cars of piling. He and Slim wondered how long the steam shovel brought up yesterday would remain on the grade.

AFTER a while both went back up to the pile driver. Several timbers had been set since Brick left. He noticed that except for one short stretch they all stood at practically the same height above the sand—up to the point where Ellers had taken the transit. From the point where Ellers had taken over, they came up in an arch, until some of them were eleven or twelve inches higher than the others. Brick noticed that fact and wondered about it. While he was wondering Eddie Sandoval returned. Eddie noticed them, too. Eddie turned to his boss.

"What's wrong with 'em?" he queried.

"Hit a hump in the bed rock," Ellers answered shortly. "You can take it now."

Apparently Eddie accepted the explanation. Brick looked at him and at the timbers.

"What would happen if some of these toothpicks were not driven in deep enough?" he queried.

Eddie shrugged. "Oh, first big rain comes, bridge would settle," he answered.

"And suppose a train was on the bridge."

"Too damn bad for the train."

Eddie commenced whistling. Brick and Slim loitered around until the unloading was done. When quitting time came they hauled the men back to the camp in the empty coal cars.

Built—but Not Operated

THE pile driver finished its task. A bridge crew topped the pilings and laid the substructure for the wooden approaches. A steel gang followed and stretched the iron; and Brick and Slim took their work train over day after day.

Once the pilings were cut, it was impossible to tell exactly what timbers

Ellers had gaged, for they had all been cut off level, and a level bridge laid over them. In fact, during the next month Brick almost forgot the whole affair. The bridge seemed solid enough. The wheels rumbled over it as he had heard them rumble over a thousand other good bridges.

On an evening in late October there was a heavy rain at the head of Cedar Gulch, and the rain became general. The work train had gone to the end of the steel. It started back toward Salt Creek shortly after the rain commenced. When it approached the bridge, a crimson flood was pouring out of the Gulch and spreading over the canyon floor.

There were no slow orders on this construction job. The men determined their speed on their own responsibility. As they rolled down toward the bridge Brick slipped across the cab.

"Yuh better take it kinda easy over this outfit, guy," he urged. "The damn thing might flop us sidewise for a spill, yuh know."

"O.K., kid! We'll hit 'er light."

Slim slowed to five miles an hour. Brick was in the gangway watching. The red water was seething about the concrete piers around the feet of the wooden pilings.

He almost expected the bridge to give down and let the train roll into the flood. He held his breath as they crawled along the approach.

Nothing happened. The track, after they had crossed it, was as perfectly lined as it had been through months of drought. He did not know that the water had not had time to penetrate that sand. He came loafing across the cab. He was grinning like a tenderfoot who has staked his roll on the wrong horse. Slim looked into his baffled face with a mischievous smile.

"Looks like yuh kinda pulled your collar off too soon, kid," he razzed.

"Yeah," Brick answered with a shrug. "Yuh can't always be right when you're jist guessin'."

It rained all night. Water boiled down Cedar Gulch, and spilled into the canyon, soaking that seven feet of sand to bed rock.

It was still drizzling in the morning, and when the drizzle ceased, an icy fog crawled down from the mesa and spread out on the plains below. Brick and Slim went into Weller. They had a tonnage train back. In it were steel rails and a car of blasting supplies to be left for the hardrock outfit in the newly completed passing track at Cedar Gulch, a mile above the bridge.

THE car of blasting supplies was next the engine. The train crew coupled up, intending to let it ride there. Slim Wiggins saw its carding. Slim had already been tossed up several times where he could see over the Pearly Gates. He went back to investigate.

"What's in this here box car, guy?" he asked the conductor.

"Few drills, an' a air compressor, an' a little TNT an' so forth. Why?"

"Well, yuh better switch it back in the train, then."

"Raspberries! No use rawhidin' around switchin' it back. It ain't goin' to hurt nothin'."

"It sure ain't, for because I ain't goin' outa here with it on my tail. The Comish rulin' an' our contract says—"

"To hell with the Comish rulin' an' your contract. You ain't on no main line railroad."

"It wouldn't take no more dynamite to blow me to glory on a construction job than it would on a main stem," vowed Slim.

The crew switched the car behind the fifth car, where it belonged.

At Salt Creek they left their commissary stuff and went on up the canyon with their rails and dynamite for the Gulch. Woodson, the boss contractor, crawled into the cab and perched on the seat behind Slim. He looked as if he had lost his last friend. He had not appeared too optimistic for the past several days. Brick had not asked him any questions since that day he had uttered the warnings against Ellers. Slim did not remember little things like that. Slim asked:

"How's the work comin', Mr. Woodson?"

"All right, I reckon," Woodson answered in a sort of what-the-hell's-it-to-you tone of voice.

He did not tell Slim there were things happening which needed explaining, nor did he mention the fact that his men were drinking so much hooch and smoking so much dope they were getting hard to handle. Slim asked no more questions.

At fifteen miles an hour they chugged up the canyon. The track had withstood the rain remarkably well. The cars rode with no perceptibly increased roll. Water had disappeared rapidly from the surface, and the torrent of last night and the early morning had dwindled to a tiny red snake crawling lazily through the sand.

As they approached the Cedar Gulch bridge Brick left the drop seat in front of the fireman and went to stand in the left gangway. Why, he could not have said. He was not consciously uneasy about the bridge, because it had not wobbled with them last night, and the water had then been all about it. He did not even remind Slim there was a bridge ahead.

They left the cut and ran out on the trestle work. Slim was whistling, a hand locked on the cab frame. Woodson was staring dismally through the fog.

BRICK reached for his watch, looked at it, started to slip it back into his pocket. He didn't get it back. The engine, which had been running smoothly, suddenly changed its direction. Its nose tilted right and down. The left rear corner of the cab headed skyward, sent the scooping apron into the roof, and tossed him up with it as if he'd been thrown from a diving board.

Slim Wiggins started to wipe the face off the air gage and shove a throttle up. Woodson fell off the seat and rolled across the gangway, knocking the fireman's feet out from under him; and before any of them had time to even think what had happened, the old engine had gone into the quicksand with a tender and three cars of rails on top of her, and a car of dynamite toppling on the trestle.

It was that car of dynamite which clung to Brick Donley's consciousness as the scooping apron hurled him into the roof. That dynamite was going in on top of them. And then the lights went out.

When he came to Brick was still against the cab roof, and still thinking about that car of dynamite. He knew he was against the roof because he could feel the beaded ceiling boards. He wondered crazily what was holding him up there, wondered if he had been blown up and was still going.

Then he heard the hiss and blow as of a mighty wind, and felt clouds of hot vapor about him. He knew now he was in a bath of hot steam. But the water about him was cold—icy cold.

He thought about that for a second.

Brick Started Crawling out. Then He Remembered that Slim Wiggins and a Fireman Were in There

He also knew that the cold water from the cab roof was closing over him, gradually enveloping his whole body.

The ice water did the trick. He came to with a jolt and sat up, spitting red sand and water into the white hot steam. He blinked his eyes to knock out the sand. His head cleared. Instead of hanging against the roof, he was in it lying down. The engine had flopped over and was on its back, but sinking slowly into the quicksand. Its movement was perceptible. To Brick it seemed horribly rapid.

He reeled to his feet. He must get out of there and get out quick. Somewhere he could hear voices. One of them was Woodson's. He was jabbering crazily, telling somebody else that there were men drowning in that engine cab. Brick groped for an opening in the cab frame. He found it, and started crawling out. Then he remembered that Slim Wiggins and a fireman

had been in there with him. He turned back to hunt for them.

His exploring hand found a body. He tugged at it, and called for help. Excited voices came toward him. There were feet on the bridge, and still other feet scrambling down through the débris into the cab. Brick clung to Slim Wiggins' overalls. He held onto Slim with the water rising about their knees. Slim coughed and sputtered and began to swear. Brick called again for help, and voices answered.

THE old engine was never raised. She was worn out anyway. She still lies there with her toes to the sky, with sand and rip-rap piled over her, and red water oozing around her ribs, rusting in the quicksand.

Woodson held a little private investigation. He fired Eddie Sandoval. Ellers was loud in condemnation of a bungling helper. Ellers piously said that an engineer who could not be trusted with a simple job like that should certainly be fired.

Eddie entered a feeble protest. Eddie told Woodson about Ellers taking the transit one afternoon and sending him away on an errand, declared that the timbers set while he was gone were the ones which had not been driven down to bedrock.

Ellers furiously denied the accusation; and because Woodson refused to take the word of "a damn little furriner ag'in' that of a white man," Eddie was let out.

Brick Donley was off for a week, resting a wrenched shoulder, and letting a skinned head heal. When he returned to Salt Creek he heard what Woodson had done to Eddie. He went straight to Woodson's office.

Maybe he made a big mistake. Maybe he should have handled it through Mr. Burns and Mr. Bender. That is what he had been told to do. He didn't. He took it to the throne of the boss contractor. He told Woodson about the afternoon when he had gone to watch the driver driving piles, told him about Ellers taking the instrument and sending Eddie on an errand.

"Do you know that Ellers gaged the piles that caused the smash?" Woodson demanded.

"I don't know it positively, but it was right about the place."

"Right about, hell! This damn kid had charge of the job. There was five hundred feet of it. Ellers done twenty of it. He done the rest. He's tried to lie out of it, an' now you're tryin' to lie for him an' hang it onto Ellers."

"But I want to see justice, Mr. Woodson."

"I'm bossin' this job. You're brakin' on the work train. You look out for your job, an' let me look out for mine."

Brick did not tell Woodson he was a work train brakeman plus. He did not dare. In fact, when he left the office that morning, he was not too certain that the boss contractor himself was not in with the enemies of the S.T. & S.F.

Eddie Sandoval was blue. It looked as if his professional career was wrecked at the start. With the kind of recommendation Woodson would give him, it would be hard to land another job. While he debated where to go and what to do, Pete Lopez hunted him up and offered him a job in the pool hall. He did not question motives. The job paid good money. He took it.

THINGS rocked along until January. The work made fair progress. It was merely a matter of digging short tunnels and cutting a right-of-way through rock along the cliff

edge. One night Brick and Slim were playing a friendly game of rummy in their caboose. They heard someone come up on the rear platform and knock timidly. Brick went to the door. As he opened it, the odor of pine oil whisked in by him. He stepped back, wondering, while Rosa Garcia and Eddie Sandoval came hesitantly into the caboose.

Slim gathered up the cards and slipped them into a pigeon-hole. Brick made a place for the young couple on the bunk. Rosa and Eddie squirmed and twisted.

Brick and Slim watched and pondered. They talked about the weather; and Slim asked Eddie how he liked to work in the pool hall; and Brick asked Rosa if she would be glad when the construction job was finished. He knew all the while they had not come to the caboose to talk about the weather or their jobs. Rosa kept looking at Eddie, and Eddie kept looking at Rosa.

Finally the girl broke the silence.

"Mr. Donley," she said flushing, "Eddie come up to tell you something —something we think our frien' ought to know before."

Brick said: "Sure—Sure! Spit 'er out, Eddie. Maybe I can help you."

Eddie looked at the kerosene lamp and stammered.

"You see, Mr. Donley. It's like this. Mr. Woodson don't like me no longer. I work for Pete Lopez in the pool hall. Pete sells lots bootleg whisky, an' maybe other stuff. Mexican boys they come in there and drink—and smoke—an' talk."

Eddie hesitated.

"Sure! Sure!" Brick urged him to continue.

"Well, one night Spanish boy tol' me about a big estrike—that's going to be—estrike, you know! Men all quit work, an' tear up bridges, an' wreck trains, an' raise lots hell."

Eddie was trembling all over. He looked appealingly at Rosa.

"You see, Mr. Donley," her big hazel eyes were searching his, "we know you been our frien'. We were afraid—maybe you get kill."

"I'm sure glad you told me, Eddie," Brick said quickly.

"You—you won't tell I tol' you!" Eddie's black eyes grew brighter. Fear gleamed in them. "Pete Lopez he kill me if he ever finds out."

"Don't you worry, boy," Brick assured him. "Pete Lopez won't find out anything from me. You've been too good a friend for that. I'll never spill the beans."

BRICK did not take that case to Woodson. He took it to Costilla for a conference with Paddy Burns. Paddy Burns coded a message to Old Hell Bender. A few days later, a crew of Federal men raided Pete Lopez's pool hall when Eddie Sandoval was off duty. They round up Pete and some of his help.

The help got off light, but when the smoke had cleared away they had fined Lopez out of every thin dime he had, and his place was sold to a new proprietor who started up again with a "recreation parlor" on slightly different lines.

But Pete Lopez didn't leave Salt Creek. He kept hanging around. He played a little pool and poker. He did not work, but he seemed always well supplied with money. He tried to make love to Rosa Garcia, and he accused Eddie Sandoval of selling him out.

Brick kept an eye on him. More than once he saw Ellers exchange swift glances with the Mexican bootlegger, and saw the two of them leave the

"parlor" through different exits.

One night in February he decided he ought to try to find out where they went. He sneaked out, following Ellers. Keeping at a safe distance, he took up the trail. Ellers left town and went along the tracks toward Cedar Gulch. Brick knew somebody met him at the culvert, because he could hear two pairs of shoes on the ties from that point on, and the sound of muffled voices. He trailed them to Cedar Gulch Bridge.

Men had been working about the bridge all that day. Brick had seen them using instruments and tape. He had asked no questions.

His quarry left the track below the bridge and turned toward the gulch. Brick turned, too. Thirty feet from the track Brick felt the dazzling gleam of a flashlight full in his face. The flash played over him for a moment, then switched off, and the sneering voice of Ellers said:

"Oh, it's you, is it, brakie?"

Brick said, "Yep. It's me."

"What you doin' out here this time uh the night?"

"Oh, out takin' a little walk for my health. What you doin'?"

"I came up here to get this instrument. I was afraid it might rain and ruin it."

Brick knew that was a lie. There was not a cloud in the sky. Nevertheless, when Ellers switched on the light again, Brick, looking at the engineer's feet, saw a case like those in which the men carried tape and transit. Ellers picked it up and started toward town.

"Have you walked far enough?" he asked sneeringly.

"Yeah. Far enough for this time."

Brick fell into step beside Ellers. Once he detected the ring of a shod heel on the rocky trail. He stopped. Ellers stopped, too. The sound did not come again.

Brick volunteered to carry the instrument. Ellers surrendered it to him without question. More than once Brick found himself wondering what kind of "instrument" he was carrying. But he never knew.

After they had passed the switch at Salt Creek, Ellers took the instrument and turned down the grade toward his office. Brick went on toward the caboose. Ellers stopped and called to him.

"If I was you, Donley, I'd be kind of careful about walking up that canyon in the dark. I've heard the night air up there isn't good for the health."

Brick laughed suggestively. "Might give a fellow lead poisoning?"

"You never can tell."

After that Brick never saw Ellers and Lopez together. He had a hunch they still talked, but he never saw them, and nothing suspicious happened.

OFTEN, as the mild winter drew toward its close, and the Sandburr Cutoff neared completion, Brick used to stand in the gorge and stare at Salt Creek Dam towering upwards. He knew that those walls of steel and concrete were holding back a tremendous flood of waters. He used to think with a shudder what would happen if that dam should break and send that flood plunging down over the railway grade.

He could not calculate, as Goofy Ellers could calculate, what damage a quarter million feet of water turned through this narrow sluiceway might inflict. He did not know, as Goofy Ellers knew, that behind this dam an enormous amount of liquid energy hung poised.

He could only guess that if all this water should be turned loose at once,

it would gut the narrow valley, sweep out every loose thing in it, drive gigantic boulders down it to the plain, rip out rail and trail, preventing for a generation the completion of the Sandburr Cutoff.

Brick did not lie awake devising and discarding schemes whereby that water might be released at once. Only the fevered brain of Goofy Ellers, burned and seared and withered by a life of ruthless hating, by a dozen years of hoping and plotting vengeance for a wrong, could turn out thoughts like that.

The spring drew on. Often when Brick had gone to bed, he was aware a light was burning in the office of the project engineer. He slept and dreamed that Goofy Ellers was standing by his bedside with a pair of dagger points like eyes descending toward his vitals; that a maniacal taunting laughter was in his ears. But when he woke the only sound was the snoring of Slim Wiggins on the other bunk.

One Sunday afternoon in March Brick drove to the dam with some other young folks. When they arrived the aged keeper was showing Goofy Ellers over it. He was standing on a ledge of rocks, pointing at an iron plate which had been riveted into the concrete wall.

That plate, he explained, was the door to a narrow passage leading lengthwise through the structure to its very center. It had been put there, so he said, for emergency use, in case the dam should later become a unit in a hydro-electric plant, as many such structures had become. The passage was sealed, so curious persons could not enter, and only by cutting out the rivets from the iron door could it be opened for inspection.

Brick did not see the brightened gleam which came into the burning eyes of Goofy Ellers. No one did. But when, a few nights later, rumor was whispered that a large powder cache on the blasting job below the dam had been robbed of more than a ton of high explosive, his nerves were set a-tingle, for he had a hunch that trouble still was in the wind.

Late in April the last rail was down. The Sandburr Cutoff was completed and ready to turn over to its owners. Within the week trains would begin running over the line.

THE day it was finished Old Hell Bender and Paddy Burns brought a party over on a rail-motor car. They stopped in Salt Creek Canyon. The Ward & Woodson outfit was loading machinery. Brick was spotting the cars for them.

Old Hell came over to shake hands. He passed out the cigars and stood chatting for a few minutes.

"We've about got our railroad finished, boy," he said.

"Yes. *We* have."

Brick was a little sarcastic. He was disappointed in not having stumbled into something big and thrilling.

"Good work you've done, too, boy!" commented the president.

"Yes, I reckon I done a pretty good job brakin' on work train."

"You done a good job detectin', too, boy."

"Oh, yeah! What, for instance?"

"Well, running that Lopez gang outa here. Why, if it hadn't been for your finding out what that Lopez guy was doing—" He hushed and stared out where the rimrock lifted jagged edges toward the sky. "You wasn't far wrong in your guess on Ellers, either," he finished.

Brick stared hard at his king.

"No?"

"No. I had Ellers looked up. Woodson never would believe it, but the best we can figger out, he was here on the recommendation of Old Flint Rockey an' the Continental outfit. Only thing I can't figger out is why he laid down on 'em. I can't quite understand."

"Maybe he got scared and quit."

"Maybe so. There's not been a thing happened since they pulled the Lopez bunch."

"Except somebody stole three thousand pounds uh dynamite."

"I don't figger that hooks up with us or with Ellers."

"Probably not." Brick was not too sure, even though this was the last day.

Old Hell looked toward the rest of the party, standing by the rail motor car.

"Well," he said with a sigh, "we got our Sandburr Cutoff finished in time for the fruit an' pumpkin rush. An' that's what we was after."

The president shook hands with him, and returned to the car to head on through toward Costilla.

The work train took a load of stuff out to the main line at Weller, returning to Salt Creek about 7.30 to tie up for the last night in the canyon.

"Nothing Left—Alive or Dead!"

IN mid-afternoon Ellers returned to his office. He was excited. His slim fingers were shaking. The fires behind his eyes were raging.

He did not remain long. He ransacked the desk, sorting out papers, slipping them into a brief case, preparing to quit Salt Creek Canyon. Before leaving he gave Rosa a few terse instructions. One of those instructions was that she should meet him at the office tonight at 8.40 to go over some last details. She was not surprised. She had often worked nights getting out his correspondence, because his work had taken him away much during the day. She had never objected, as he had been paying her well.

At 8.20 she came to the office. Eddie Sandoval was with her. They stood outside the door and looked into the west. Miles away, the canyon walls formed a narrow gash against the sky, with little flashes of lightning rippling through. They went inside. Eddie pulled down the blinds, held her in his arms and kissed her.

"I wish—I didn't have to work tonight," he said. "I'm afraid."

"What you 'fraid of?" She ran her soft fingers through his black hair.

"I don't know. Just afraid."

She pulled his face down and kissed him, and he went into the darkness on his way to work at the pool hall.

At exactly 8.40 the door opened again. Goofy Ellers was not there. Instead, the door was closing slowly under the stealthy hand of "Marihuana" Joe. He was a hard man. He had been often in Salt Creek before Christmas. She had not seen him since the men had raided Pete's place. She had heard fierce tales—tales which made her blood run cold, for according to gossip Marihuana Joe had been one of Pete Lopez's dope runners who had balked at nothing.

"You go me, Miss," Joe said.

"Go—go where?" She was stiff with fear.

He shrugged. "*Conmigo*—with me!"

"I won't!" she cried.

"Oh, *si! Si*, you go me!" He showed her an ugly clasp knife in his

right hand. "You go me, you no be hurt. You no go me—" He drew the left forefinger across his throat and his dope-brightened eyes bulged.

Trembling until she could scarcely stand, she stood by the table. She reached for the telephone. She did not get it. A hard hand crashed upon her wrist. Her fingers went limp.

"No!" Joe hissed. "You no do that!"

He switched off the light. She was sorry now Eddie had pulled down the blinds. Someone might have seen through the window. They stood in darkness for many minutes. He held her wrists tightly. When no one was in sight, he softly opened the door, dragged her out with him, and made for the tracks leading out toward Cedar Gulch.

A quarter mile from town, near the spot where she had first met Brick Donley, he left the grade, and turned toward the mesa. Farther on two mountain ponies were tied to cedar shrubs. He forced her to mount one of them. He mounted the other, and they rode eastward toward the mouth of Cedar Gulch, following an age-old trail.

SHE soon guessed where he was taking her. Since Eddie had gone to work in the pool hall she had learned dark secrets of the land and its life. Before the law had chased Pete Lopez out he had established hideouts and way stations for his henchmen. Whisper said that one such hideout was an abandoned ranch far up toward the ridge running north from Cedar Gulch.

By 9.30 Rosa knew beyond any question of doubt that she was being taken to this hideout. Why, she did not know.

Lopez was loose. She had seen him more than once with Mr. Ellers. He had been in Salt Creek for the last four days, drunk most of the time. But that Lopez was responsible for her abduction did not occur to her.

When she arrived at the cabin her wonder ceased. The shack itself had been fixed up for sleeping quarters. Two beds of rough pine boards nailed together stood in two corners. Over them were spread ragged, vermin-infested blankets.

In a third corner stood a rusty cook stove, one corner propped up on rocks. In the fourth was a rickety home-made table covered with an oilcloth, cut into holes, and filthy from much use and no washing. At that table, a bottle of whisky between them, sat Goofy Ellers and Pete Lopez.

She stopped abruptly. Lopez had been drinking heavily, but he carried his liquor well. He pushed back his chair and came pacing toward her. She backed into the corner. He followed step by step. He seized her wrists, and his lustful eyes bored into her soul.

"So you thought I leave you down there with that slick-haired Sandoval, eh?" he taunted. "Or maybe you like Meester Brick Donley better! Eh? Well, they both be een hell so soon as the alarm clock goes off." He laughed uproariously.

"You turn me loose!" she screamed.

He held her in his gorilla-like arms, and kissed her again and again. She scratched and clawed like a wildcat. He laughed and bellowed.

Fingering an alarm clock on the table, Goofy Ellers licked liquored lips, and turned fanatical eyes upon them.

"Leave that girl alone till we get this business done," he said. "Then she's yours."

Lopez laughed, kissed the girl again and flung her down.

ELLERS sat at the table tampering with the alarm clock. It was a large one, with a luminous dial. The sound of its incessant ticking vibrated through the cabin, now rising until the room seemed full of it, now fading almost into nothingness.

Behind the clock was a box the size and shape of an automobile battery. Rosa did not know it was a firing battery, such as the blasting gangs use to set off charges of explosives without the use of a fuse.

The clock and battery had once been ordinary equipment. Ellers had made them over. He had insulated and soldered in the clock, connected contact points by wires to the battery, so that when the alarm went off it completed a circuit. He had tried that contraption a thousand times. It had never failed to work. Yet, for many minutes he toyed with it tonight, setting the clock, watching the hands crawl toward the hour of alarm, watching the explosives flash as the circuit closed, sending a spark through the bared wires which lay in a bath of powder.

Rosa watched him and Lopez. She heard them laughing and gloating in anticipation of *something* that was going to happen when "thees alarm clock go off."

"There will be nothing left in that canyon," Ellers said tonelessly. "Nothing, alive or dead!"

"And we—" There was a note of uneasiness in Lopez's drunken voice.

"We shall be saved. When it is done, I shall sleep in peace." The little room rang with the hollow laughter of a genius gone mad with hate and evil dreaming.

The storm came out of the northwest. It crawled over the ridge. A little before ten Ellers and Lopez left the room. Joe tied her hands behind her and left her on the bed. Then he, too, went out.

After a while she heard hoofs on the hard ground. They came toward the door and stopped. Joe and Lopez came back into the cabin. They threw the covers off the other bed. Rosa looked anxiously toward them. Under those tattered covers were tiers of wooden cases. She did not need to be told what they contained. She knew now where the stolen explosives had gone.

Silently the men carried out the boxes. She counted them—sixty-four in all. Thirty-two hundred pounds of high explosive. Enough, if set off at once, to blast the heart out of a mountain! She should hear the clash of wood on wood as they fastened containers to pack saddles, and lined eighteen pack mules out for a trip.

Before the explosive was all out, Ellers came into the cabin. He himself packed the firing battery and the alarm clock in separate boxes. Into a third box he put a portable acetylene torch which he took from under the bed. When he had finished, Lopez came in and they all gargled a final drink. Rosa watched fearfully. Lopez left the table. His eyes were glowing like black fire.

He picked her up and rubbed his brutish, bearded face over hers. He bruised her lips with his. She fought and kicked.

"Fight, you leetle she-devil!" he taunted. "I geet you fin'lly where I want you. We go set thees alarm clock. Then I come back, an' we start for Ol' Mexico. You an' me!"

BUT Pedro Lopez did not take Rosa Garcia to Old Mexico that night. He let her loose. Ellers turned to Marihuana Joe.

"I'm going to leave you here with this girl, Joe," he said impressively. "Remember, if you let her get away, or if anything happens to her—" He drew his forefinger across his throat, and dropped his head.

Joe grinned and smirked.

"I bring her to you, Meester Ellers. No? When you come back, you breeng me *mucho dinero.*"

Leaving the man and the girl alone in the cabin, he and Pedro walked boldly into the night. The storm was approaching. Lightning sliced an inky sky, and thunder rocked the mountains.

They turned their eighteen pack mules up the ridge toward Salt Creek dam. The trail was dim. Time was when Pedro Lopez had known its every crook and turn. When the dam had been building, he had driven many a burro train of illicit hooch to the thin backbone above the tunnel, and met the distributors there to receive his price.

It was nearly eleven when they left the cabin. It was after twelve when they came to the head of the canyon, where a steel trail wound down the canyon wall to the base of the dam.

Heavy darkness lay about them, a thick, impenetrable, velvety darkness. At long intervals, sheet lightning quivered over the mesa. Under the glimmering burning skies, the gash of Salt Creek Canyon stretched as a jagged scar toward the west. From the foot of the dam a thread of rain-splashed water trickled, wasting away, past the watchman's cottage lying dark and silent under its trees. Then the rain came down in heavier sheets, and muffled all other sounds in its incessant beat.

Cautiously, carefully, they headed their train down the steep trail. The slip of a foot meant death; and what to Goofy Ellers was worse than death —the failure of his plot for vengeance.

Near the foot of the dam they went directly to work. At the end of construction the narrow passage had been securely sealed with the iron door, placed over the opening and fastened with iron rivets whose heads were deeply sunken in the concrete. This much Ellers had previously determined. That's why he had brought the torch.

Completely hidden now from the watchman's cabin by projecting walls of rock, he got out his torch. In a short time he had cut through the door, making an opening through which men could crawl and take those wooden cases of explosive.

While he worked with the torch, Pete unloaded the mules, stacked boxes on the ground beside the opening, and turned the animals back toward the ridge and safety. When the opening was cut through they carried the cases inside and stacked them in the passage close up against the head gate opening.

It was almost three when they carried the last case into the passage. It was still raining, but the electric storm had passed on into the east.

With trembling hands Goofy Ellers tied in the wires which he had brought, connecting the firing battery and the detonators, and cutting into the circuit the alarm clock. He wound the alarm and set it for 4.00.

"Be so careful, Meester Ellers!" Pete cautioned. "If that go off now—"

Pete had been confident and boastful back in the cabin where the clock had sat on the table and the dynamite had been under the bed. Here, with the circuit all closed except the clock's part, he was not so sure. He knew that when that charge went off someone was going to die.

While Ellers adjusted switch and

dial, he moved fearfully toward the exit, as if the difference of a few feet would matter when a ton and a half of powder went off.

Ellers made the connection. Pedro uttered a cry of alarm. Ellers set down the clock, straightened his bent figure, whipped out an automatic pistol, and stood pointing its nose past his partner toward the entrance to this hole in the dam.

" Marihuana " Joe

BRICK and Slim went to the pool hall as usual that night. They knew it would be their last in Salt Creek. They were not exactly sorry. It would be nice to get back where they could go to a picture show and sleep in one of Widder Haner's clean beds.

The place was crowded. Since Pete Lopez had been driven out there had been less liquor and rough stuff. Tonight the floor had been cleared, and a big dance was going on. Brick pranced around with a pretty bookkeeper from the office and a waitress from the café.

He was waltzing with the waitress when Eddie Sandoval burst into the hall. Eddie spotted him at once and came straight toward him. Eddie was so much excited that he spoke with a decided accent.

" Meester Donley," he whispered. " I want speek with you."

" Sure!" Brick said.

He led his partner to a seat, excused himself, and followed Eddie out.

" What's happened, fella?" he asked.

" Rosa—" gasped Eddie. " Miss Garcia. She is disappear."

" What's that?"

Though Brick never had any intentions toward the young girl, he nevertheless had taken a keen interest in her and her affairs since the night he had snatched her from the arms of the unknown attacker.

Briefly Eddie told as much as he knew. He had promised to call for her at 10.30. He had just gone and found the office empty.

Brick called Slim out, and the three of them hurried to the office. The door was unlocked. They went in and switched on the light. Her wrist watch was lying on the table. Her handkerchief was on the floor, as if she had dropped it in sudden excitement; and her coat and hat were still on the hook.

" Where is Ellers?" asked Brick. That had always been his first question when anything had happened.

" He was to be here at 8.40 to get out some work," Eddie explained.

" You don't know whether he came?"

Eddie shook his black head. " I don't know, Mr. Donley."

Brick called Woodson up to the office. He explained what had happened.

" Is that all?" Woodson asked disgustedly. " Little stenographer hidin' out somewhere?"

" Ellers is gone, too," informed Brick.

" Yeah. Still harpin' on Ellers, are yuh, Donley? Very likely they've stepped out together to celebrate," Woodson said with a knowing wink.

" She never go out with that guy unless she forced to," Eddie defended hotly.

" Oh, yeah! That's all you know. They're all alike, these here wimmen. Git a guy nuts over 'em an' then turn

him down. Go on back to the dance an' hunt yuh up another one."

WOODSON herded them out of the office, locked the door, and returned to town. Brick and Slim went with Eddie down to the telephone office and put in a call for Mr. Bender in Costilla.

"What's that?" shouted Bender. "The Garcia girl—why, she was the one—"

"Yes. She was the one. Ellers is gone, too. Doesn't seem to be anywhere about here, and had an appointment with the girl at the office at 8.40."

"Jist stand by. I'll check up and see if he's been seen around this burg lately."

Bender was gone for a long while. He finally called back.

"Ellers was in town late this afternoon. He got his car serviced here at 6.30 and drove toward Wilton Ranch. I'll have a lookout posted to intercept him if he tries to get out of there, unless he's already gone. You're sure of that girl, are you? Sure she's really been spirited away?"

"I think so, Mr. Bender. She's on the square. Has a mother here, you know, and she's tied up to this Sandoval kid."

Brick made no attempt to organize the town into a searching party. He and Eddie rounded up a few friends and scoured around until well after midnight. They found no track of her. When the storm broke they realized they could do nothing until daylight, so they returned to Salt Creek.

Eddie left them. Brick and Slim went to the caboose to turn in. It was a little after one.

"Sure looks damn funny what's happened to them two," Brick said.

"You can't tell nothing about them wimmen, kid. Apt as not she's slipped away an' went skylarking off with Ellers." He went to the door to throw out a pan of water. "She'll probably be back in town tomorrow with some big cock an' bull story about what's happened to her. Why, dammit, I've saw—"

Slim didn't say what he'd "saw." He dropped the pan on the caboose floor and leaped back, upsetting Brick, who had slipped a wet shirt over his head.

WHEN Ellers and Lopez left the cabin Marihuana Joe sat down at the table. There was a quart bottle half full of whisky on it. Joe and Pete had brought it up from the border. Joe took a good stiff pull from it and shoved it away from him. He looked toward Rosa and muttered to himself.

Presently he got up and came toward her. He staggered a little. She moved over against the wall. He laughed unpleasantly, but did not offer to molest her. He turned back the covers at the foot of the bunk and fished out a package of cigarettes.

They were tiny cigarettes, not more than a quarter as large as ordinary ones. He lighted one and began to puff contentedly. Rosa sniffed the air. An odor was permeating it, but it was not the odor of tobacco. She knew it was marihuana. Joe kept puffing and blowing out smoke through his nostrils.

Sitting at the table, he reached for the bottle. He drew his hand away and muttered some more. For several minutes he smoked and watched that bottle. He appeared to be hypnotized by the sparkle of the stuff within. Directly the spell was broken. With an oath he sent his hand creeping along the table. His hand closed over the bottle. He lifted it and drained it.

Rosa watched him. Hope was beginning to form in her own breast, and with the hope a deadly fear. Marihuana and whisky sometimes put men to sleep. Sometimes it didn't. She shuddered. She almost wished Ellers and Lopez would come back.

Minutes crawled away. Lightning flashed, and thunders shook the mesa. A wind came out of the breathless clouds. Gravel and sand flew up and rasped the closed window. The rain came in crashing torrents on the tin roof, and water trickled down the uneven walls.

Her keeper grew restless. He cowered back as if the storm frightened him. He laughed uproariously. Then he began to curse and sing in his native tongue. Rosa understood the songs he sang. They made her tremble and turn pale. Again and again he paused to turn his bleary, swimming eyes upon her.

He arose and stood holding to the table. He looked at the girl and laughed.

"Cut my throat, will he? Damn! I show him! I cut his throat! I cut out his heart and feed it to the pigs! I steal the girl!"

He opened the clasp knife, and started weaving an uncertain path toward her bunk. She crawled off it and backed away. He shifted the open knife to his teeth, and using hands to steady himself, crept slowly, uncertainly after, driving her into the corner by the stove.

Her hands were tied behind her. She struggled and tore at them, and tears spilled down her cheeks.

Now the uncertain hands were groping. Now the hands were closing over her shoulders, were tearing at the pale blue silk. She uttered a frightened scream. Then she hurled herself outward, kicked at him desperately. He grunted, reeled, stumbled back toward the table. His head struck against its corner, and he lay still.

IN horror she watched. A trickle of blood came out of his hair and blackened the floor about it. Terror gripped her. After the terror came cunning.

She saw the open clasp knife lying at his twisted feet. She edged toward the knife. She lay flat on the floor and picked it up. As she came up the body moved and a leg straightened. She slipped over to the table. She laid the knife down, sharp edge up, on the dirty oilcloth, and lay on the knife.

She was there a long time, squirming and writhing. When she got up her wrists were free. Blood was oozing from slight cuts she had made in frantic efforts to slash that rope. She shot a fearful look at the huddled figure. She turned from it, and rushed out the door, into the rain.

She did not reason where she went. But instinct guided her flying feet over the rough rocks down the trail she had come hours ago. One impulse spurred her. That impulse was to put ground between her and the devil who lay sprawled in a pool of blood in that lonely cabin, and that other devil who was coming to claim her *when the alarm went off.*

The skies blazed with a dazzling glimmer. In the glimmer she saw the earth lying black about her, and rain streaking against it, and bounding up in white spray. Ahead of her was the spray. On she plunged. One step. Two steps. Three—foot upraised, she uttered a scream and hurled herself backward. She had come to the rimrock, to the brink of Cedar Gulch. She shivered and turned, groping, away.

Once more the lightning played over the mesa. She peered wildly about. She had missed the trail, but a little way to the right she could see its black shadow, writhing down over the edge of the precipice.

How she made that trail in the shivering night is a mystery. Again and again she lost her footing, stumbled over snags and boulders. Rocks and thorns tore at her, but she ran on and on. She reached the canyon floor, and found the grade of the Sandburr Cut-off, leading down to friends and safety.

Then she saw a square of dim light looming ahead.

It was the light of the kerosene lamp, filtering through the dingy door of the freight caboose. She headed for the square of light. She groped for a grab-iron and found it. She hurled herself at the closed door.

Then the closed door opened, and an apparition of a fat engineer, with no pants emptying a pan of dirty water. She brushed by the pantless hoghead as he fell back into the caboose, and hurled herself at the figure of Brick Donley, frozen in the center of the floor. In one stride she had reached him, was holding bleeding hands imploringly at him, and jabbering and crying.

BRICK put strong arms about her, as if she had been a little child. Like a little child, she sobbed and whimpered out her story. She told of her abduction, and of Ellers and Lopez in the shanty on the mesa.

"And they were going somewhere—to set an alarm clock—and they were coming back for me when they set that clock."

"Alarm clock!" Brick tightened his grip on her.

Her hysteria was leaving her. She was becoming rational. She told of the boxes of dynamite and the train of pack mules, and described the firing battery, and the clock they were playing with, and the acetylene torch. She told it all. With each new detail Brick became more uneasy.

And then he turned Rosa Garcia loose. She sat quickly down on the bunk, upsetting Slim's footwater on the caboose floor.

"I've got it!" he cried. "I know! We've got to do somethin' quick!"

"What's eatin' you?" rasped Slim. "Are you goin' nuts?"

"The dam!" Brick screeched. "It's the dam they're after. Them two devils aim to blow that dam!"

"Whut—whut's that?" Slim's protuberant eyes widened.

"I know it." Brick was scrambling into his shoes. "That's why they stole that dynamite. That's why Pete Lopez has been hangin' around this place. That's why Ellers laid off his deviltry, an' went down to study the lay of the dam. I see it all now. Why, I remember him standin' by that iron door!"

At Four O'clock—

"WHAT you goin' to do?" bellowed Slim. "What—"

"You hurry out there an' get steam on that ol' engine. We got to git up there an' head them devils off."

Brick burst out of the door. Slim waddled to the engine, ordered the watchman to raise a roaring fire and get a head of steam as quickly as ever he could.

In five minutes Brick had got Eddie Sandoval and Woodson on the phone.

In ten he had called Bender and Burns in Costilla. It never dawned on him that he might be making a big mistake, that tomorrow he might be the laughing stock of Salt Creek and the construction gang. He acted on hunch, and he was sure that his hunch was all right.

Woodson came on the run. He was cursing a bungling, meddlesome work train brakeman for everything he could lay his tongue to. He hushed cursing long enough to listen to Brick's excited explanation.

"Horsefeathers! You dumb red-headed ox! You still tryin' to frame Ellers into somethin' mean?"

"Frame hell! The crazy galoot's planned to murder the whole kit-an'-bilin' of us. You, too. Right now he's up there plantin' powder in that dam to blow the whole bunch of us to glory. Go on back to bed an' sleep till the devil calls you."

Woodson did not go to bed. He ran to the caboose and talked a moment with Rosa Garcia. Then he rushed out and ordered men to arouse the sleeping village and get the people away from the canyon. By this time the engine was under steam. They coupled it to the caboose, and with Woodson, Rosa, Eddie Sandoval, Brick and the conductor on board, started for the dam.

Slim lost no time backing up the canyon. At twenty miles an hour he went plowing into the darkness. He did not know at what minute three thousand pounds of powder might go up in the dam and send a flood sweeping every loose thing out of that canyon.

The track went up the south side of Salt Creek Canyon. The iron door was on the north end of the dam. To reach it they had to cross the canyon and climb to a ledge fifty feet above the bed rock.

"You'd better have the fireman take the engine on through the tunnel," Brick said significantly.

Slim understood. If the dam went out with the engine in the canyon it would be swept to instant destruction. He instructed the fireman to go through the bore and remain at the east portal.

"If anything happens," he added, "you get down Sugar Creek as fast as you can."

BRICK, Slim, Eddie, and Woodson descended the shale and hurried toward the entrance to the passage. It was still raining. Brick switched on the flashlight. Where the door had been was now only a jagged opening into a narrow tunnel.

"They're in there," Brick announced tensely.

Woodson rushed up, saw the jagged cuts made by the blow torch. He made a long face.

"Well, I'll be damned!" he whispered dumbly.

Brick flashed his light inside. The passage went straight into the dam, then turned sharply to the right. Brick played the beam on the turn. As it flashed over the sweating wall, he heard Pete Lopez utter a startled cry. He sprang toward the opening. Slim Wiggins was right behind him.

"Wait! You fool!" barked Slim. "They'll kill you like a rat in a hole."

Brick stopped. Slim came on and thrust his hat past the turn on the end of a stick. A volley of shots greeted the thrust and the hat came out with three holes in it, and while the narrow passage rang with the echo of the shots a burst of maniacal laughter mingled with the sound.

"Is that you, Ellers?" Woodson asked hoarsely.

"Who do you think it is?" screeched the crazed engineer.

"You might as well come out."

"Like hell I'll come out!" Ellers screamed back at him. "If you want me, come and get me!"

Seconds slipped by. The rain ceased. A dead calm settled over the canyon. They could hear the labored breathing of the men in the tunnel. They could hear the ticking of a clock—a cheap alarm clock. Brick recognized it. He gulped. He wondered if that clock had been connected, and when it would ring.

"We've got you trapped, Ellers," he said.

"You've got me trapped," Ellers said. "But I'm not coming out. I'm here with two good automatics and plenty of shells. I can shoot your way, but you can't shoot mine because I've got two tons of dynamite stacked against the end wall of this tunnel. And if you don't shoot into it, it's going off anyway, because I've got a time bomb connected to it. The bomb will go off at four o'clock." Ellers laughed weirdly, crazily.

Brick looked at his watch. The luminous dial showed 3.31. They had twenty-nine minutes.

Brick whispered something to Slim.

"Reckon it would work?" Slim whispered back.

"We can try it. We've still got time."

Slim left the tunnel. Brick gave him the flashlight. They heard the rattle of gravel as he slid down the wall.

"Where—" began Woodson.

Brick said, "Sh-h-h!" Then leaning toward the contractor, he whispered a few words, and Eddie Sandoval was listening.

The clock kept ticking—louder and louder. Brick wondered if Pete Lopez would remain in that tunnel, to be blown to atoms. Or would he—

HE kept looking at the luminous dial. Ten minutes passed. Nineteen remained. Eddie Sandoval was twisting and squirming. Woodson went to the open door and looked out. Would Slim never come? Vague misgivings began to crawl through Brick Donley's consciousness. Suppose Slim should fall and hurt himself. Suppose the fireman had gone beyond the east portal of the tunnel.

Twenty minutes passed and nine remained. Eddie Sandoval kept edging ever nearer the entrance to the passage. Brick did not hear him. Brick was listening for a word from Woodson, the word that Slim Wiggins was coming back.

And then Brick heard the noise of frantic footsteps ring through the silence, heard a startled cry, knew that Eddie Sandoval had lost his head and started into that tunnel to bring out two wreckers. Instantly the sound of Eddie's movement was lost in another sound. Three shots rang out and a body thudded to the floor.

Brick sprang forward, then halted.

"Eddie!" he called. "Eddie!" But Eddie Sandoval did not answer.

The echoes of the shot were ringing in the passage. Woodson's voice was calling: "Here he comes!" Sound of insane laughter blended with the echoes. Under cover of the laughter, Brick edged nearer to the opening. He thrust forth a groping hand and found a body. He dragged the body past the turn. In the tunnel a light came on, a flashlight beam, pointing toward the opening; and Ellers' crazy voice cried:

"Now come on in!"

There was no time left to think. Slim stumbled through the iron door.

"Here!" he chattered. He thrust four red fusees into Brick's outstretched hand.

Quaking until he could scarcely hold it, Brick jerked an ignition cap over a fusee head. Sputtering red lights danced upon reeking walls, and sulphurous odors came to strangle. For a second only he retained the burning brand, then hurled it far into the inner passage.

He himself was coughing and strangling on the fumes. He ordered Woodson out to give him room. He lit another fusee and threw it, and still another.

Within the passage Pete and Ellers now were coughing. Brick himself backed to the iron door to keep from strangling. The coughing in the passage grew more violent. Not long could human lungs endure the fumes of burning sulphur. A minute only, then the voice of Lopez crying out in terror:

"I'm coming out! Don't shoot!"

"Like hell you're going out!" shrieked Ellers.

Another shot reverberated through the depths. A stumbling step. A muttered Spanish oath. A cry which ended in a gurgling sound, and bodies plunging to the concrete floor and whispering echoes fading toward the silence.

Brick sprang toward the passage.

"Lopez!" He called frantically. But Lopez did not answer.

"Ellers!" Brick's voice was louder still. Ellers, too, did not answer.

BRICK thrust a foot into the passage. There was no greeting shot. He hurled his body through. Still no response. Wondering at the silence, he plunged into the ever thickening smoke —two red fusees exuding sulphurous smoke, and giving off their crimson sputtering light. He stumbled toward the rear. He saw the cases stacked against the end.

He saw two figures sprawled upon the floor. From the chest of one a stream of red was gushing. From the back of the other, an eight inch knife handle was pointing upward. And Ellers' dead hand was reaching toward the clock, reaching out as if he would have pulled the switch, and sent the dam into the canyon.

One thought alone now possessed Brick Donley. To reach that clock. To jerk some wires before it was too late.

He groped for the timepiece. He heard a click—the click which would precede the deadly ringing of alarm. His frenzied hands grabbed those soldered wires. He coughed, strangled, all but dropped the clock. He almost feared to touch them, for his touch might set the charge, and hurl him through the concrete and send the dam cavorting to the canyon.

His fingers tightened. One quick frantic jerk. The wires were broken. The alarm was ringing. But no explosion rocked the earth, and silence settled on the echoes.

THEY carried Eddie Sandoval to the caboose. He was not dead. The slug had hit him high. They raced with him into Salt Creek and called a doctor. And while he worked, an engine came racing up from the west. Behind the engine was a private car, and in the car a railroad president and his division superintendent.

Old Hell Bender came into the way car. He asked questions and was answered. He saw the girl with hazel eyes sitting on the bunk close to her lover.

Brick himself was swallowing hard,

and trying to think of other things and other faces. Old Hell Bender helped him out. He clapped five iron fingers on Brick's shoulder.

"You done the trick again, Donley." He was shuffling his feet and cackling. "I knowed you would! I knowed it! Why, if it hadn't been for you two—"

"Aw, it wasn't nothing, Mr. Bender," demurred Slim.

"Just luck, Mr. Bender," averred Brick. "Pure unadulterated luck."

The doctor brought a stretcher into the caboose, and they loaded Eddie Sandoval on it. Brick helped Rosa Garcia out of the caboose and up the steps of the president's private car.

When Bender's train had pulled away toward Costilla, he and Slim returned to their own dingy palace. Slim got a pan of hot water and bathed his aching feet. He did not remember he had bathed them once tonight already. Brick crawled out of the blue flannel shirt, and hung it on a nail to dry.

"Did you see how tired she looked, Slim?" he inquired sympathetically. "Poor kid!"

And Slim said: "I'm goin' to have two cups uh coffee, an' a double order uh ham-an'-aigs fer breakfast. Ain't you hungry?"

And now that he had time to think of it, Brick decided he was.

LEFT-HAND ENGINE CABS

AMERICANS were surprised to see the "Royal Scot" engineer sitting on the left side of his cab. There are no left-hand engine cabs in the United States or Canada, although trains of the Chicago & North Western (a road built partly by English capital) run on left-hand tracks; and there are a few other cases in the United States in which a train operates on a left-hand stretch of track, usually on a grade where the right side is steeper—parts of the Santa Fe, Bangor & Aroostook, etc.

In England in the days when men traveled armed on horseback, it was the custom to pass to the left so that the sword or pistol arm would be on the side of the man passed. Later, in travel by coach or wagon, the driver sat on the right side to give his right arm free play in wielding the whip.

Traffic passes to the left to this day in England. English trains make left-hand meets on double-track sections. That puts the engineer in a corresponding position to his American brother when meeting opposing trains—that is, seated toward the "outside" of the right-of-way, where most semaphore signals are located. Nevertheless, John Bull has never seemed quite sure which side is best for a hoghead. Two of the big British roads favor the right-hand type of cab, and two the left.

When the vast British railway consolidation was effected in 1923, "right-hand cab" roads and "left-hand cab" roads were merged together in the new super-systems. There was talk of settling once and for all which side of the cab British engineers should be positioned, but nothing came of it.

For instance, the L.M.S. continued building Midland Ry. pattern engines with right-hand cabs side by side with new standard types of power having left-hand arrangements. It took five or six years of indecision before a definite ruling was made that all new power must be left-hand controlled. Even today on the L.M.S. Midland Division the normal position for the engineer is still on the right side, although their crews are now often called on to operate left-hand "standard" cabs. On the other L.M.S. divisions, which favor the left-hand scheme, right-hand equipped locos have got circulated round into their power stocks, and their engineers too work both types of cab layout.

Similar conditions prevail on the other British systems. Only last year the Southern Ry. abandoned right-hand cabs in favor of left-hand controls for new power, after building both kinds for ten years. The other big British systems, the L.N.E.R. and the G.W.R., early settled on right-hand cabs for all new locos. Nevertheless, when the L.N.E.R. built their famous high-pressure compound, No. 10,000, they located the engineer on the left.

Wreckage of a Pennsylvania Train Caught in the Great Johnstown Flood of May 31, 1889, in Which More Than 2000 People Perished. The Flood Occurred after a Dam Broke, Releasing the Waters of Lake Conemaugh into the River Valley

On the Spot

IN our September issue we asked readers to vote on two short novels, "230 Grand in a Suitcase," a Pullman murder mystery by A. V. Elston, and "Old Hell Bender," a rail labor story by Brother Dellinger. Elston got a lot of votes, but as November goes to press, Dellinger is leading him *nearly three to one!*

In fact, looking over the ballots already received for September, we find Dellinger walking away with the field. "True Tales of the Rails" comes second in popularity, followed by "Light of the Lantern" and "On the Spot."

For fifth place, "230 Grand in a Suitcase" is tied with Cliff Sweet's humorous yarn, "Cap Wheeler's Gravy Train." The next five in the voting list are the M. & O. locomotive roster; "Jobs," by Rufe Gable; "The Ashtabula Catastrophe," by Earle Davis; "Railroad Scrapbooks," and the department for the model builders. Ballots are still pouring in. Final returns probably will change the line-up.

Although the eleven top-notchers include only *four* fiction titles as against *seven* non-fiction, the fiction leads in number of votes received, due to the enormous popularity of E. S. Dellinger. Many readers call him "the world's greatest railroad story writer."

However, "Boomer Bill" Hayes, author of "Desert Shadows," also has a large following and may outrun Dellinger in the November balloting. Or perhaps an illustrated fact article or short story will capture first place this month.

Give your favorite authors a break! The more votes a man gets, the more stories we buy from him. The more votes a department gets, the more space it will get.

Turn to page 141, fill out the coupon and mail it without delay to the Editor of RAILROAD STORIES, 280 Broadway, New York City. If you don't want to clip your magazine, send a brief letter or postcard—either of which counts the same as a coupon vote. Results of voting will be announced in future issues.

Here's What the Readers Said:

WHY clutter up a good railroad magazine with murder mysteries? The only interesting part of "230 Grand in a Suitcase" was the ending, where the engineer "made up those lost nineteen minutes." I have 2 scrapbooks, one of the T. & P., on which my dad has been in continuous service since 1887. The other is mostly locomotive pictures.—MRS. A. M. RANGE, 414-A Clayton St., San Francisco.

* * *

ALTHOUGH I do not care for most of Dellinger's stories, I do like "Old Hell Bender" because it's the finest analysis of the railroad-bus problem you've ever printed.—A. D. ROBINSON, 1049 Dorchester Ave., Winnipeg, Canada.

* * *

I DON'T like Dellinger's labor story, which is against the busses. I am not a railroad employee, and I prefer detective stories like "230 Grand in a Suitcase."—T. M. HOWARD, 170 W. 78th St., N. Y. City.

LABOR stories such as "Old Hell Bender" make a big hit with us conductors. I am on the Milwaukee Road, 22 years' seniority. Ask your authors to give the conductors a break. Lay off the engineers for a while. Reading your magazine, I often wish I had gotten a job on the head end.—E. F. BAILEY, 1005 S. 30th St., Milwaukee, Wis.

* * *

"OLD HELL BENDER" is a perfect description of the men who cut my throat, figuratively speaking, 2 years ago on the C. B. & Q., except that the officials I worked for were oily-tongued diplomats instead of outspoken bullies. Results were the same in either case.

Please tender Dellinger the congratulations of a nation of downtrodden railroad men. His story was the most vivid and truthful picture of greed I've ever seen. I was beginning to wonder if RAILROAD STORIES had been brought under control by such officials, but this story convinces me that it is still the same old RAILROAD MAN'S MAGAZINE. Don't print my name. I am on the tail end of an extra board and don't want to talk myself out of a job.—BRAKE TWISTER.

BECAUSE there is no love stuff in "230 Grand in a Suitcase," I think it is better than "Old Hell Bender."—S. C. Lowe, 105 Marquette St., Quebec City, Canada.

* * *

"OLD HELL BENDER" is the best novelette you've printed since Layng's "Riders of the Iron Trail" (Oct., 1932).—H. Strickhart, 26 Jackson Ave., Jersey City, N. J.

* * *

HAVING been in the railroad game 18 years and knowing a little about it, I think "Old Hell Bender" was poorly written—in at least one point. Perhaps I should say it was written just as a brakeman would write it, giving the foundation of the railroad—namely, the track men—a black eye. In all my railroading I have yet to find a section or maintenance foreman willfully to let a job on the main line go unfinished to repair a job on a side track.

In the first place, it is not a very big job to replace a rail. No signal maintainer will ever leave one until it is fully spiked and bolted into place, regardless of weather or other conditions.

Flagging rules on all Class I roads today are much more strict than the author pictures them. No foreman will try to destroy a main line, no matter for how short a time, without proper flagging. Tell Dellinger for me that I don't think much of his imagination when he wrote that story. But what can you expect of an ex-brakeman? Such fellows are ready to give the track and signal men a poke on the chin every chance they get. Track men may be underpaid and "dumb," in the eyes of some people, but they have always been the real money makers for the railroads, for without track men no railroad will ever run.—Frank Markert (Santa Fe section foreman), Cameron, Ill.

(Editor's note: *We are quite sure Mr. Dellinger had no intention of giving track men a bad name. However, we partly agree with Mr. Markert. "Old Hell Bender" would have been even more effective if the incident to which he refers had been handled differently. But we're not trying to pass the buck. The slip was just as much our fault as it was the author's, because we O. K.'d it.)*

* * *

"230 GRAND in a Suitcase" is about the best piece of fiction I have ever read in your magazine. —Fred B. Otis, editor and mgr., *Bedford Daily Mail*, Bedford, Ind.

* * *

UNTIL now I have never commented on your fiction. I enjoyed "Old Hell Bender" and would like to see it in the movies—provided the right locomotives are used. It gets my goat to see a supposedly good film with a late model Pacific at the head end of a passenger train and then have the camera move down the rails to show the whirring driving wheels of an early Consolidation or Mogul type engine having the old Stephenson valve gear and slide valves, instead of the drivers of a 4-6-2 or 4-8-2 with "monkey motion" valve gears and piston valves as used on passenger engines today.

Most railroad fiction writers fail to describe their engines They just say, "Number So-and-So," and let it go at that. Authors who really want to please Railroad Stories readers should mention type, age, class and other interesting facts.—E. K. H.

Wanted: Dope of All Kinds

THE ENGINE PICTURE KID is your best author. Who writes those stories, anyhow?—C. A. Shafnit, Box 246, Carrizo Springs, Texas.

(The answer is: Johnny Thompson, ex-tallowpot. Johnny isn't a bit like the Kid in his stories. He is happily married to a girl named Olive, he has a mustache, and does not collect engine pictures. His address is Gilsum, N. H.—Editor.)

* * *

I SEEK information on Oklahoma roads. Would like to hear from old-timers who worked in Indian Territory and Oklahoma. Also I collect tickets, timetables, photos, passes, historical relics, etc., of such lines. Will answer all letters. —T. E. Gootee, 1367 Roanoke, Springfield, Mo.

* * *

WHERE can I get a Brant book of train orders?—Jay Reed (R. I. brakeman), What Cheer, Iowa.

* * *

I WANT details on an old engine, of which I have a photo. She was used by U. S. Govt. in building a dam at Guernsey, Wyo., in 1927. "Morrison Knudson Construction Co., Boise, Idaho," is painted on tank.—V. W. Beloit (U. P. op), Box 422, Lyman, Neb.

QUOTING from E. S. Dellinger's "Worthy Brothers" (Aug., 1932): "He knew what it was. A hundred times he had heard it the *boom-bang-bum-bum* of jostling cars as 45 of them loaded 60 tons each—brought fiercely up against a locomotive in reverse."

What I'm getting at is this locomotive in reverse. I've seen hoggers do it at say 10 m. p. h. Usually the wheels lock and slide, but at 40 or 60 m. p. h., who does it? I should like to ask Mr. Dellinger if it wouldn't be healthier for that piston to hit a cylinder full of concrete than one full of live steam at 200 lbs. with the ports closed?

A hogger of a K-2 Pennsy several years ago had this little prank played on him by a broken eccentric rod, and what that engine didn't do to herself! Bent main rods, blown cylinder heads, broken crank pins, stripped herself. Will some expert please clear this up?—J. McAlastair, R. D. 2, Northport, N. Y.

* * *

WOULD like to hear from engineers.—Pearl P. Payne, 2109 N. King St., Greenville, Texas, and (Mr.) Ray Wilcox, 40 Birch St., Mt. Vernon, N. Y.

PLEASE give details on: (1) Rear-end collision involving troop train on B. & M. at Lansingburgh, N. Y., about 30 yrs. ago. (2) Smashup between street car and D. & H. train at Cohoes, N. Y. I think it was July 4, about 1900, over 10 trolley passengers killed.—GEO. LALLY, 22 Hawthorne Ave., Troy, N. Y.

* * *

WHY print horrible wreck pictures in a railroad book?—G. MCMULLIN, Danville, Calif.

(EDITOR'S NOTE: *For the same reasons that some Brotherhood journals print them. Wrecks are part of railroad history. Every phase of life has its dangerous side. Statistics show that more people are killed or injured in bathtubs than in train wrecks. They slip on soap, fall asleep in the tub and are drowned, let babies scald to death, monkey with electricity in the bathroom, etc. When people read these facts they are more likely to be careful. The same applies to wreck pictures. Railroad men familiar with wrecks are the strongest boosters for "Safety First."*)

* * *

WHO can give facts on the wreck of the Jersey Central "Scranton Express" at Oxbow curve about 20 years ago? Also the wreck of the Reading "Interstate Express," at Bethlehem in May, 1927?—D. W. K.

* * *

WOULD like details on the Frisco wreck on the bridge over Division Channel between Cape Girardeau and Chaffee, Mo. Engine boiler is still in the channel.—C. H. BENNETT, Benton, Mo.

* * *

IN Sept. issue you answered a query about the Del. & Northern Ry., saying they had 4 engines. They now have only 3, as No. 7 has been dismantled. I have photos of those 3, also photos of the U. & D.—H. P. EICHMEY, 94 Highland Ave., Kingston, N. Y.

* * *

OUR July issue contained a switching problem. Answer was printed in August. Simpler solutions were sent in by John G. French, Box 404, Vernon, B. C., Canada, and F. B., an op in Detroit. —EDITOR.

* * *

WHO will write some real stuff on Lackawanna construction from Clark Summit, including Dalton, Factoryville and Nicholson, Pa.? I worked there as a water boy 1914 and 1915. About 3 miles from Clark Summit I used to pester the engineer and foremen to run the engine. I learned to fire it, even played around the cabooses. If any of these crews remember me, please write.

Does anyone recall the night, either in 1914 or 1915, when a construction engine of standard gage came by its own power, with the whistle wide open, in the middle of the night from Factoryville to Dalton? I suppose someone got her started, tied the whistle down and jumped off. Boy, it woke us all up. My father, Mike Fitzko, was "car knock" at both Nicholson and Factoryville.—MICHAEL FITZKO, JR., 1240 N. Berendo, Los Angeles.

"ASHTABULA CATASTROPHE," by Earle Davis (Sept. issue) interested me because my grandmother, Mrs. Jas. Cook, died in that wreck. Can someone tell me if her body was identified and if any claim was paid? I have no knowledge, as my folks died when I was very young.—H. C. WITBECK, 4301 Wilmer St., Houston, Texas.

* * *

I AM the nephew of 2 railroad builders, James L. Cook and Wm. Cook, and a grandson of W. Cook, of Ashtabula, engineer on the N. Y. C. I live in Ashtabula and I have talked to people about the bridge disaster of 1876, which Earle Davis told about. I have been over and under this bridge. People who had been there in 1876 enjoyed the article. All the names are familiar. One mistake in the story is that it said the train stopped at the depot on the east side of the bridge, when the depot is on the west side.—CHAS. LOCKWOOD, 1019 Prospect Rd., Ashtabula, O.

* * *

HAVE been a reader of your magazine since I was knee-high to an angle iron. First read it back in 1907 at Greensburg, Ind. Finances did not permit me to buy it, so Mike Brogan, a crossing watchman, would let me read his copy.

"Ashtabula Catastrophe" recalls a similar one on the Big 4 in the fall of 1926. Train No. 75, a manifest freight southbound from Benton Harbor to South Anderson, came thundering into La Fountain. The big Mike rolled onto a short bridge, which collapsed, sending the engine into the bed of the creek with her cab down and her front end up in the air. The tender upset, of course, burying Engineer Frank McClintic, Brakeman Simon Phiel and Fireman Homer Miller in the cab. To add to that horror, a gasoline tank 5 cars back followed 5 boxes into the gully. It burst into flame, burning the bodies in the cab beyond recognition. An undermined abutment was supposed to have caused the wreck.

Robert F. W. McDonald, please write. I am not the dirty boomer who barged in on you in Flatbush in '32. Nope, Bob, I have a job now and have remarried.—MERVIN MCNEW, 614½ S. Washington St., Marion, Ind.

* * *

I WISH to hear from Earle B. Allison, an exrail I met through your magazine. I lost track of him a year ago.—L. J. DIXON, JR., 3610 Baring St., Philadelphia, Pa.

* * *

E. ANDERSON, please write.—F. J. BRADFORD, Co. 905, C.C.C., Camp Rincon, Azusa, Calif.

* * *

FOR "Famous Engineers" series, I suggest Charles H. Fahl, P. R. R. engineer of the 1027, who pulled the first Atlantic City flyer in about the year 1897, and to whom President Voorhees wrote that he "so ran the train that for three months, no matter what delays occurred, always got her into Atlantic City on time." Also Martin H. Lee, Pennsy veteran.—ERIC L. CLEUGH, care of The Royal Bank House, 64 O'Connell St., Dublin, C.8, Ireland.

(EDITOR'S NOTE: *Can any reader give us details on either Fahl or Lee?*)

For Rubbernecks Only

DETROIT Zoölogical Railroad, 2½ miles long. was given to the City of Detroit by the "Detroit News" in May, 1931. It cost $20,000 and has a gage of about 30 inches. Track is modern, consisting of hardwood crossties plus some modern steel ties. Switches and frogs are of the spring-back type. Ties have real tie plates. To overcome the use of steps in boarding the "Limited," the stations were built with raised platforms. This road does not come under the Interstate Commerce Commission, but has a commission all its own, mainly to see that persons trespassing on the right-of-way are arrested and fined.

This pike was originally powered by 2 gas engines, with 2 trains of 7 coaches each, the passenger capacity of each train being 147. In May, 1933, new automotive engines were put in operation. These engines, Nos. 3001-3002, consist of General Electric generator, model Z-506, Chrysler industrial gas engines and Timken axle and housing. The gasoline motors have 6 cylinders and 96 H. P. This plan allows the motor to be throttled down to 1,800 revolutions to drive the generator, which means that the motor will be virtually idling and the exhaust barely perceptible. The D. Z. R. R. is for passenger service only and runs from Decoration Day until mid-November. The main driver has no flange, making it easier to get around the curves. The engines were built by Cagney Bros., Jersey City, N. J.—E. WHITE, Drayton Plains, Mich. (Grand Trunk Railway).

Speed, Tonnage and Motive Power

ABOUT 4 years ago a train pulled into 29th St. yard of the P. C. C. & St. L. with No. 2 engine pony wheel, 10 drivers and trailer, 124 hoppers of coal, 14,700 tons. From the time it left Logansport, Ind., until it cut off at Chicago 116 miles, took exactly 110 minutes! If you want to verify this, our dispatcher will supply facts.

The P. R. R. out of Chicago Pan Handle has a new train, No. 88, that hauls only perishables and stock, making the run from Chicago to Logansport in 90 minutes, 60 to 90 cars, and is called the world's fastest freight train! I will gladly give further information if you send self-addressed stamped envelope.—MEYER EVANS, P. R. R. yard conductor, 3935 West Polk St., Chicago.

T. J. MORAN (Aug. issue) bragged about a 5,800-ton freight train on the Erie and suggested it might be the record tonnage. 5,200 tons is a small train. Often I have seen a westbound Jersey Central freight tear through Mauch Chunk, Pa., at 40 or 50 m. p. h. with from 8,500 to 9,500 tons. Anyone acquainted with the Jersey Central's L. & S. Division will tell you that's a train. Would like to hear from other readers on the subject of long freight trains.

I have covered the U. S. by rail from coast to coast and from Canada to Mexico, using 15 different roads, but the fastest ride I ever had was on the Jersey Central "Bullet" when she did 10 miles at 85 per.—D. W. KERN, 604 Centre St., E. Mauch Chunk, Pa.

SOME years ago I rode the Reading "Fisherman's Special," an excursion with 14 old wooden cars pulled by a "Camel-back" Atlantic type, No. 348, Class R-6, from Cape May to Camden, N. J. On the stretch between Tuckahoe and Winslow Jct. we ran 83 m. p. h. for several miles. I'd like to hear from Reading fans.—BILL MACMURTRIE, 912 S. 49th St., Philadelphia, Pa.

* * *

RECENTLY I went to Atlantic City with a friend and we were stepping along between 70 and 80 m. p. h. We had a Pennsy Class K-4s on the head end. Our engineer knew how to turn the wheels around on that baby. While there, we saw a Pennsy Class E-6s come into the Pennsy-Reading station with a P. R. R. baggage car and 12 Reading day coaches. These cars are about 50 tons each and that would be about 650 tons. I have heard of a Pennsy Class I-2s pulling 40 loaded freight cars along with the crummy. Let us hear more about 4-4-2 types and light 2-6-0 and 2-8-0 and 2-6-2 types with long trains. —WARREN STOWMAN, 7444 Forrest Ave., E. Germantown, Philadelphia, Pa.

* * *

SOME fellows who write to me state that the B. & O. 7400 type 4-4-6-2 has been converted back to a 2-6-6-2 as originally built and that 5047 has been converted from a 4-6-2 to a 4-6-4 with firebox of the watertube construction. The new classification of the 5047 is V-1. Also that the Pennsy 7274 which was nearly completely demolished in the Federal St. wreck last spring has been rebuilt as a K4s and is back in service.

The D. & H. 604 which was wrecked in the heavy snow storm of Feb., 1934, has been rebuilt with streamline effect like the 650 class of Pacifics but has the conventional sand dome while the 650s do not. No. 604 also has a new enlarged tender like the 653. I saw the 604 and 602 side by side at the C. P. R. roundhouse in Montreal the second week after the 604 came from the shops, and the difference in the two engines was very noticeable, although originally they had been alike.—ELWIN K. HEATH, Barre, Vt.

* * *

REFERRING to a record run of the Burlington "Zephyr," Garet Garrett wrote in *The Saturday Evening Post:* "Toward the end of the journey, a superintendent of motive power, formerly a locomotive driver, who had been coming to it all day, leaned across the aisle to say: 'I love the locomotive. God knows, I hate to see anything like this happen to it. But I'm a mechanic, too. A machine is for what it will do. This thing skins the locomotive alive.'" Why can't everyone be as fair as this official?—R. MOWERS, 1455 State St., Schenectady, N. Y.

DELLINGER'S story in the Aug. issue held up a gas car for our admiration. Shades of the immortals! I've just finished a 2-week rail trip on which I assiduously dodged the gas wagons, even when it meant waiting for another train. Finding one of them at a depot is like buying a box of candy and finding it full of peach stones. I'm quite a juice fan myself. I like trolleys and interurbans, but for real transportation nothing can beat the iron horse. While riding a Great Northern steam train the other day we overtook and passed a speeding electric train as if it were still!

I read that the Burlington "Zephyr" was so light that 10 men and a boy pulled it. What a train! But is it as safe as heavier equipment? —R. S. WILSON, 708 S. 9th Ave., Yakima, Wash.

(EDITOR'S NOTE: *Mr. Wilson throws peach stones at gas cars, but we believe the much-despised gas car could prove the salvation of small roads or branch lines that otherwise might have to suspend.)*

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HERE are details as requested on the L. S. & M. S. "Reindeer" (Sept. issue): There were 2 of these engines, "Reindeer," No. 190, and "Gazelle," 191. In L. S. & M. S. classification book of 1882, the 190 was listed as built by Danforth & Cooke in 1859. Total weight, 57,000 lbs.; with 26,000 lbs. on the single pair of driving wheels, which were 4 ft. 6 in. diameter; 11 x 16 in. cylinders; heating surface, 430 sq. ft.; water tank capacity, 700 gals.; and boiler pressure, 125 lbs. In the 1885 book this engine was listed with the same dimensions, but with the impression that it had been built in 1872 by the L. S. & M. S.; probably rebuilt that year; scrapped in 1893.

The 191 was listed in 1882 as built in 1862 by C. & E. Ry., having same dimensions as 190. Probably she also was built by Danforth & Cooke and rebuilt by the C. & E. in 1862. This information came from G. P. Becker, Cambridge, Mass. These engines were used to haul the pay cars, 190 on main line and branches between Buffalo and Toledo, 191 between Toledo and Chicago. The 190 had a reindeer picture painted on the tank and real antlers on the headlight. She was trimmed with polished brass.

This was before my time; when I saw 190 she was just a plain locomotive. I have been told there was a point on the Lansing Div. where, if the stop were made in a certain hollow, the engine couldn't start the one pay car. However, Chas. J. Donohue, for years chief clerk to L. S. & M. S. supt. of motive power, told me he had once ridden 2 miles in 90 seconds on the 190.—C. D. WRIGHT, 503 S. Lakeview Ave., Sturgis, Mich.

* * *

ACCORDING to H. S. Lawton, who was supt.'s clerk of the L. S. & M. S. Kalamazoo Div. in 1888, a paymaster named Hinkley rode the pay car pulled by 190. Before paying an employee, Hinkley invariably asked the man his name, even though he had known the fellow for years. This habit provoked a lot of cussing from his friends.—B. H. WARD, 658 3rd Ave., San Francisco.

In the Maple Leaf Dominion

Photo from W. G. Cole, 741 Canning St., Montreal, Canada

No. 652, 2-6-0 Type, of the Canada Atlantic (Now C. N. R.) at Coteau Landing, Que., in 1898. Built by Rhode Island in 1886, She Was Originally No. 10, Then 81, Next 652, and Grand Trunk 2343; Scrapped by the C. N. R. in 1921. She Had 17 x 24 Cylinders and 57-In. Drivers

TWO brothers, who are also brothers-in-law, retired recently from the C. P., Len and Al Solloway. Each was an engineer with 47 years' service. Both live in Vancouver, Len at 1157 Harwood St., and Al at 1033 Pacific St.

Len was No. 1 on the seniority list at Drake St. roundhouse, while his younger brother was No. 2. For years they had been running on alternate days between Vancouver and North Bend, leaving Vancouver at 2.45 P.M. daily at the throttle of the eastbound "Dominion," returning at 9 A.M. the next day with the westbound "Dominion."

Al brought the "Dominion" in for his last time on a Friday morning and Len wound up his railroad career Saturday. "The company is losing two of its finest men," said C. A. Cotterell, gen. supt., B. C. District.

The Solloway boys were born in England but came to Canada as babies and got their first taste of the iron road by working in construction gangs on the Credit Valley Ry. in Ontario. Later they went into engine service together.

"In the old days," Len pointed out, "an engine crew trimmed the lamps, cut firewood, drew water through a siphon and made necessary running repairs. Now engines are treated like a millionaire patient in a big hospital. There is a specialist for electrical appliances, another for air brakes, one for boilers and another for pistons and rods."

On his farewell run, Len pulled the longest passenger train (19 cars) that ever arrived at Vancouver. According to *The Daily Province*, Al was given the "Dominion" 50 minutes late for his last run, and made up all but 13 of those precious minutes.—BILL SANGSTER, 2855 Douglas Rd., Burnaby, B. C., Canada.

* * *

ANY of the boys I know on Welland Canal Const. Ry. or M. C., please write. I was known as "Red" and "Scotch." Would like to hear from John Bone and Dan Diggins and "Duffy" from St. Kitts, Ont.—L. J. MACDONALD (ex-fireman), Sydney Mines, Cape Breton, Canada.

* * *

FOR more than a year the Alberta Government tackled the problem of helping farmers in the drought areas. Finally they decided on a plan. A huge tract of land has been reserved up north, near the Little Smokey River. Under an agreement with the government, farmers can trade their arid land for acreage in the reservation. They are allowed to remove fences, buildings and all other personal property. Taking advantage of free freight, hundreds have moved into this new district in the past few months. The government is giving each family $15 a month relief for the first year.

This move is boosting business on the Northern Alberta Rys. Thirty cars of settlers' goods came off the Hanna-Hat line. All were billed for Falher, 278 miles N.W. of Edmonton, arriving 23 hrs. after leaving Edmonton—which was no great speed. The C. N. R. sent a special engine to pick up the settlers, the longest train on the "Peavine" branch since 1928. From Falher the settlers had a 30-mile haul overland to the reservation.

The "go north" plan apparently has been a death blow to the Peavine, which may be abandoned next year. With the passing of this branch a dozen small towns would be wiped off the map; dozens of grain elevators with them.—JOHN F. POTTS, Cessford, Alta., Canada.

* * *

PRINT something about our "Newfoundland Ry." and more railroad songs.—DAVID J. POWER, Donovan's Post Office, Newfoundland.

Read 'Em and Weep

A MAN feels embarrassed to pull out RAILROAD STORIES, with its gaudy covers, on a train or street car; people think you are a reader of cheap fiction. Why not give us more dignified covers and print on a more expensive grade of paper? —J. B., McKeesport, Pa.

(EDITOR'S NOTE: *We used to have "more dignified covers and print on a more expensive grade of paper," and sell* RAILROAD MAN'S MAGAZINE *for a higher price; but readers did not adequately support a magazine of that type. Now, with a new name and the present low price, we are getting much better reader support. No one should be self-conscious over a railroad cover picture. Read Emerson's essay on "Self Reliance" and stop worrying about what other people think.)*

* * *

YOUR 6 departments are good. But, oh, what fiction! It's terrible!—L. MCGEE, 706 Parker St., Jacksonville, Fla.

* * *

AT a model-builders' exhibition I was handed what appeared to be one of the scores of fifth-rate wood-pulp magazines. Upon opening it I found, with amazement, not the cheap stories and badly written articles I had expected, but a wealth of information and entertainment I had not dreamed possible in a specialized magazine. Thereupon I bought as many back numbers as I could get. I would have begun reading RAILROAD STORIES years ago had I not been scared off by the sensational flamboyant covers, which give no indication of the superior quality of the contents.

Your photos are well reproduced—best I've ever seen on pulp paper. As for fiction, I enjoy its railroad atmosphere, but find too much similarity of plot. I would sacrifice it all for fact articles of equal value. No, I wouldn't give up the humorous yarns by Earp or The Engine Picture Kid. Nor Brandhorst's "Colorado Midland" (Sept., 1933), best story you ever printed. The worst was "Hot Shot!" (April, 1934). It took 10 authors to grind out your worst story! —G. A. BREWSTER, 9433 221st St., Queen's Village, N. Y.

Freight Train with Snow Plow Bucking through the Drifts on the Prince Edward Island Ry. (Canadian National System)

Photo by Keith Pratt, Bloomfield Sta., P. E. I., Canada

Scrapbooks, Just Scrapbooks

"RAILROAD SCRAPBOOKS" (Sept. issue) was most interesting. I have 6 scrapbooks, and will describe my way of handling 2 of them. These 2 contain matter that I call "Evolution of the Iron Horse." I arrange pictures of locomotives according to dates built, using a loose leaf binder. I insert extra leaves as necessary and thus keep together all pictures of engines made the same year. Extra printed matter pertaining to any of these engines also is pasted in the proper place.

One can follow the history of motive power by looking through these books, noting changes in design, weight, etc., as shown by the printed pictures, diagrams and dimensions. I insert ruled blank leaves in the front part of each book and write headings such as "Famous Old-timers," "Historical Engines," "Freak Locomotives," "Super-power Locomotives," "Foreign Locomotives," etc. On the outside covers I paste large railroad views.—L. H. JACKSON, Waterford, Pa.

* * *

I HAVE been a scrapbook fan 22 years. Have passed through all the stages of experiment and greenhorn books mentioned in your article in Sept. issue. One of my old "hit and miss" books I compiled while with the A. E. F. in France. Am now gradually transferring material from them all to my one and only real volume, which now has a numberless number of pages, measures 11 x 17 by 7 inches, and is still growing. It weighs plenty.

I use a regular office type binder with metal hinges and 3/8 inch screw posts in inch and half-inch sections. Pages are cut from book stock punched by myself from a template with a special machine shop-made leather punch and bound on the narrow side. Binder strips are glued to both sides of each page, giving me 2 between pages and no bother in changing pages. Material is glued with mucilage to both sides of the pages.

I buy 2 copies of RAILROAD STORIES each month, "pull the pins" on each copy and file all the material in the big book. I take from the back of one page in the magazine what I destroy by cutting the front of the page in the other copy. Articles of too great length, also stories, I transfer whole to smaller volumes in which I bind them into reference books, using smaller screw posts and 5 and 10c store loose-leaf binders. I never use string or rings, as those types of books are a nuisance to work with.

My snapshot album of over 1,000 snaps is built up with screw posts. Each picture is numbered and catalogued. That book represents an outlay of over $130. Films are kept in a card file catalogue.—HOMER BURCH, Sarasota Tourist Park, Sarasota, Fla.

* * *

I KEEP engine pictures but not in a scrapbook. I took a window shade and pasted the pictures on it and hung it up in my room. The pictures were stuck on with wet flour. That was almost a year ago, and they are still on. This arrangement permits quick comparison of various engines.—JOHN FORD, 249 Broadway, Fort Edward, N. Y.

Everybody's Department

SOME readers praise your articles but knock your fiction. My vote is equally divided. I find the fiction of high caliber. I read Jacobi's "Phantom Brass" (Aug. issue) on a stormy night, and it brought back memories.—M. C. WHITE (brass pounder), Pawtucket, R. I.

* * *

APROPOS of "Company Soap" (Oct. issue): Several Illinois Central Railroad locomotives worked up a lather recently at Hopkinsville, Ky., instead of generating maximum steam, until deputy sheriffs caught 4 small boys taking their daily baths in the railroad's tank. Their soap raised the boiling point of the water, keeping down steam and slowing down the engines. The boys were warned to bathe at home.—RAY WILCOX, 40 Birch St., Mt. Vernon, N. Y.

* * *

EVERY letter and clipping I received from U. S. and Canada in answer to my comment printed in the "Spot" in 1932 is being saved. I have never seen North America, but am homesick for it. I wish someone would write me again. How I long to be out there with you all, living your railroad life on the prairies and in the mighty Rock Mountains!—W. H. G. FULLER, 62 Sherwood Park Rd., Sutton, Surrey, England.

PACKARD'S "60 Years—and Out" (July issue) would pass for a true tale. I am an engineer, aged 61. Dad and Grandpa were both engineers and died in harness.—WM. E. RICKER, 416 Shirley St., Winthrop, Mass.

* * *

I AM writing this in a cabin 8,000 ft. up on the shoulder of the Big Sandia, about 35 miles from Albuquerque. Am finishing a new novelette, "Return of Redball." It is hot as Hades in Albuquerque, but here—right at the noon hour in the middle of August—it is nice and cool on the rustic porch. I'm up here alone, doing my own cooking. I have a wood fireplace. Get water from a cool spring just below the cabin.

All around are big trees, and aspens, and maples, and redwoods, and box alders. My nearest neighbors are the wild turkeys which roam the wilderness, and my bed-fellows are a pair of mice which have built a nest in the mattress. They are not very troublesome, however. From the looks of things, I'll stay here the rest of the summer, except when I go down for groceries.

The Sandburr Cut-off story touches a chord not sounded much by me in the past, and not sounded true to life by many writers of pulp

paper fiction—the chord of the Spanish-American population of the Southwest as it actually exists. Most of the Mexican dope we read is bunk. The Mexican youngsters, as I had an opportunity to study them as one of their teachers for 15 years, are a pretty nice lot of kids. Today they are filling positions of trust all over this country.

The idea of the tunnel by the dam was conceived years ago, for such a tunnel actually exists in Cimarron Canyon, 50 miles from Springer, N. M., where I used to teach school. The St. Louis, Rocky Mountain & Northwestern built a rail line to Ute Park, with the line projected to intercept the D. & R. G. W. at Taos Jct.

When Eagle Nest Dam was built, years ago, the tunnel was dug through just a few feet from the dam, so as not to disturb the dam by blasting. That tunnel stands today, "a black bore in the granite, mute prophecy of a railway" which will never be constructed.

Nights when I've had my tent pitched in the canyon below that dam, with 86,000 square feet of water behind it, a thin wall of concrete standing up there 154 ft. above the canyon floor, I've thought with a shudder what might happen if that dam should break—or if some fiend should suddenly decide to wipe out whole communities by setting a charge of powder where it would wreck the structure! Far-fetched but possible.

The Sandburr Cut-off is, of course, the Colmor Cut-off on the Santa Fe, from Dodge City, Kansas, to Colmor, N. M. This cut-off is nearly finished. When completed, it will give the Santa Fe Lines a route 60 miles shorter than their present trackage, and with grades such that one of their 3,800 class engines can handle 4,000 tons without a helper. The idea of the boy growing up to hate the railway and swearing eternal hatred against it also is from life, as such a character actually existed in the Ozarks of Missouri.

Although I am deeply grateful at getting letters from the fans, they will have to pardon my not answering, as my time is taken up with story writing and my health is not what it used to be in the days when I was braking on the Mop and Frisco.—E. S. DELLINGER, 1415 E. Tijeras Ave., Albuquerque, N. M.

International Engine Picture Club

READERS who collect, buy, sell, exchange, or make pictures of locomotives, trains, cars, etc., are listed here as members of the International Engine Picture Club. There are no fees, no dues. Names are published in good faith, without guarantee.

A membership button is given FREE to those who send in a "Readers' Choice" coupon (page 141) and self-addressed stamped envelope. (If you live in Canada or any foreign land, enclose a loose 3c stamp from your own country instead of the envelope.) Address Engine Picture Editor, "Railroad Stories," 280 Broadway, New York City.

THIS club was founded almost four years ago. In all that time it has been highballing down the main, stopping only for plenty of pickups and very few setouts, with no slow orders and a better track under it every mile. It is carrying the fastest-growing hobby in the world, that of collecting engine pictures, and not once has the chief dispatcher found it necessary to put it in the hole, or has any reader thrown a red board in its face. But its consist is becoming so heavy, and reservations for space are coming in so fast, that the operating department has found it necessary to issue a few rules for the benefit of all concerned.

The first is that it cannot promise to carry the same member more often than once every three months. Certainly nothing could be more fair than that. The second is that members are reminded that this is a club and not a store, and that members who deal in engine photos for money alone, or who talk too much in terms of money, are not welcome. The third is that members must write their names and addresses more clearly. The operating department has a reading knowledge of seven languages, including the Alaskan, but it cannot decipher written English which has been cruelly distorted. If you can't write, print. That's all this time.

R. ALEXANDER, High Haith, Center Harbor, N. H., wants photos of trains exhibited at World's Fair in 1934.

R. ALDINGER, Box 76, Randolph, O., collects timetables of railroads, traction, bus lines; will send W&LE and T&I timetable to anyone sending one of Cleveland Alliance & Mohoning Valley, Northern Ohio Power & Light or PRR of about 1927.

C. ANDERSON, 2943 23rd Ave., Oakland, Calif., has SP fireman's badge to trade for engineer's badge of any eastern road; must have

company's initials. Also has 350 eastern engine pictures to trade for SP, WP, NWP, UP, Santa Fe.

E. AUGUSTINE, 1339 23rd St., Des Moines, Ia., interested inventions for steam engines.

L. BARKER, 309 W. 99th St., N. Y. C., exchanges snaps from all over world.

A. BOGOLUBOV, P. O. Box 220 Kharkov 31, Unraynia, U. S. S. R., Europe.

W. BEARD, 2805 Ft. Hamilton Parkway, Brooklyn, N. Y., makes prints, postcard or smaller.

N. BEIER, 2222 Rusk St., Madison, Wis., has "Progressive Examinations of Loco. Engineers and Firemen," by J. A. Hill (1891); "Air Brake Catechism," by R. H. Blackhall (1902, 254 pp.), for best offer in engine photos.

R. BITTING, JR., 1429 S. W. 2nd St., Miami, Fla.

L. BRESEE, 750 Park Ave, E. Orange, N. J., has set of 16 pictures of Cuban rolling stock and motive power; list to anyone interested.

W. CAIN, 1068 Stuyvesant Ave., Trenton, N. J., trades and sells trolley and interurban photos; has many cities.

H. CLAUSEN, 344 55th St., Brooklyn, N. Y., has about 400 clippings of electric and steam locomotives, 14 large size photographs of famous types, 9 publications ("Lima Steam Locomotives," "Locomotive Progress," etc.); will trade all these for railroad photos; write.

T. CONOVER, 36 E. Tulpehocken St., Phila., Pa., has 21 x 27 maps of Phila. trolley and subway system to trade for two 116 size engine photos; also PRR, B&O, CRRofNJ, Reading timetables to trade for others.

H. COTTER, 216 Islington St., Toledo, O., wants Jan., Feb., Apr., May, and June, 1932, "Railroad Stories."

L. DONOVAN, 15A Walk Hill St., Jamaica Plains, Mass., wants early timetable of the Portland-St. Johnsbury (Mountain) Division of Me. Central.

R. DUNIGAN, 996 Link Ave., Springfield, O., specializes in USRA engines; has many Big Four and others to trade for these. Would appreciate help in compiling list of roads with USRA engines.

G. CAHILL, Locomotive Department, N. Z. Rys., Napier, Hawke's Bay, New Zealand.

P. EILENBERGER, 380 E. 71st St., Chicago, Ill., has photo of B&O new 4-6-4 type; will trade 116 size negatives of Chicago roads for any Mallet negatives; wants complete information on Santa Fe and Burlington Mallets.

J. FARMER, 490 E. Water St., Lincolnton, N. C., trades engine photos for timetables; has booklet on new Cascade tunnel to trade for 2 copies of BRT Mag.; trades old copies of "Railroad Stories"; fans in Richmond, Va., write.

J. FRENCH, 456 Pine Ave. W., Montreal, Canada, has 116 size of roads running into Montreal; wants any size up to 5 x 8.

V. GARDNER, 236 Fairmont Ave., New Castle, Pa., trades PRR orders for Santa Fe and SP.

J. GROW, 135 E. Madison St., Rushville, Ill., has 116 size of western and midwestern roads, incl. many small Colorado lines; sample and list for 10c. Has enginemen's register, 1906, 1907, of Colorado Springs & Cripple Creek District for best offer in pictures.

J. GRUPP, 128 W. Elk St., Glendale, Calif., has 116 size of SP, also UP and Burlington streamlined trains, for sale.

C. HALL, Alta Loma, Calif., will buy drawing of interior of locomotive cab.

T. HARRILL, Ellenboro, N. C., will exchange employees' timetables on all five divisions of SAL for one or more of other roads. Has following for cash: 33 div. and system passes; employees' timetable NC Div.; SAL freight classification; 1926 Industrial Shippers' Directory; 1903 "Practical Switch Work"; will buy "Locomotive Engineers Journal" or "Baldwin Locomotives" of recent date.

L. HARRISON, 2330 14th St., Sacramento, Calif., has 116 size of SP, WP, NWP, NCNG, Santa Fe. Also Sac'to. Northern and Petaluma & Santa Rosa electrics. Write for list.

E. HEATH, Box 15, Barre, Vt., has nearly 7,000 photos all sizes; also many roster books, incl. 3 from England; also 200 sheets of data.

H. HILL, 72 Anderson Rd., Bernardsville, N. J., has 2½ x 4¼ photos of 23 locomotives at World's Fair, also many of eastern roads.

R. HOFFMAN, 2118 Air Line Ave., Toledo, O., wants to hear from other members in Toledo.

S. HOYOSTEK, 28 Mangam St., Cohoes, N. Y., has public timetables of many roads to sell or swap for "Railroad Stories."

L. James, 421 15th Street, Columbus, Ga., makes pen and ink drawings of engines on southern roads; exchange or sell for 25c each.

W. IRVING, care R. Grey, 571 Ry. Reserve, Pretoria, South Africa.

A. KRIVETSKY, Tramvayni per 11, Didube, Tiflis, Keukasus, Asia, U. S. S. R.

W. JANSSEN, 320 Linn St., Peoria, Ill., wants photos of the following interurbans: K&UT, C&IT, SIR&P, C&StL, SD&E, BP&J, AG&StL, AJ&P, CBE, MVI, ICE. Will sell 5 x 10 or 5 x 7 of Peoria Ry. Term., SLG&W, PT, RIS, K&G.

L. JOYCE, 468 Delaware Ave., Rochester, Pa., has PRR Book of Rules, 1925; Air Brake Catechism, 1910; Westinghouse Automatic Brake Equipment, 1911; PRR-Westinghouse Brake Test, 1913. Will trade any or all of these for best offer in "Railroad Stories" before Dec., 1933, or any model railroad magazine.

C. JØHNSON, 71 Hillcrest Ave., Trenton, N. J., will sell street car and interurban prints of 70 roads; write for list and free sample.

P. JOHNSON, R. 3, Box 220, Mt. Vernon, Wash., has following "Railroad Stories" at 15c each prepaid: Nov., Dec., 1931; Jan., Feb., Mar., Dec., 1932; June-Dec., 1933.

R. JUHLING, 215 Emerson St. E., E. Pittsburgh, Pa., wants PRR, B&O photos; will sell Westinghouse air brake pamphlets.

H. KAISER, 931 Carroll St., Racine, Wis., wants photo of B&O caboose without cupola.

K. KENNEDY, U. S. M. C., U.S.S. Chicago, will send 4 x 5 photo of train on Ferro-carril de Guantanamo (Cuba), snapped at boat landing, at cost (10c).

K. KIER, 2312 W. 107th Pl., Chicago, Ill., will send postcard of D&H streamlined engine to anyone sending self-addressed, stamped envelope; has NYC calendar pictures for sale.

P. KLINE, 110 W. Oley St., Reading, Pa., has photos of CRRofNJ and Reading, sell or trade; write.

E. LEO, 2451 Catherine Rd., Pasadena, Calif.

N. LIGGINS, 9309 93rd St., Edmonton, Alta., Canada, wants correspondent 14 or 15 years old living in western states who has photos of big American power to trade for CPR and CNR.

F. LINEHAN, 230 Middlesex Rd., Chestnut Hill, Mass., sells photos; write.

A. MARSH, Box 545, St. Augustine, Fla., Sec. Florida Locomotive Historical Society, wants to hear from engine picture collectors who have photos of Florida locomotives, trains or railroad scenes to exchange for other Florida photos, or loan the society to be copied for preservation. All photos will be returned.

L. McGEE, 706 Parker St., Jacksonville, Fla., has book "One Thousand Pointers for Machinists and Engineers" (McShane, 1896), illustrated, to trade for what have you. Also trades drawings.

E. McLAUGHLIN, 2537 Foster Ave., Chicago, Ill., has photos of Chicago street car equipment; buys, trades or sells. Send self-addressed, stamped envelope.

P. McMILLAN, 7055 N. E. Flanders St., Portland, Ore., has few photos of SP power on Portland Div. for sale or trade; write.

F. MILLER, 1342 Tenth Ave., Schenectady, N. Y., starting collection, wants help.

R. PEEPLES, 1374 W. 59th St., Cleveland, O., has 23 copies of "Argosy" and 12 detective magazines to trade for "Railroad Stories" before July, 1932.

F. PENRY, 6547 Pinkney St., Omaha, Neb., has many tickets, dated 1898, to and from Omaha on practically all lines; also book of rules of Fremont, Elkhorn & Mo. Valley; best offer takes.

J. MIRSKY, P. O. Box 1180, Mexico City, Mexico.

S. NEWTON-WATSON, Stationmaster, B.B.&C.I. Ry., Abu Road, Rajputana, India, Asia.

S. PRATAP, care Mechanical Engineer, P.W.D., Suva, Fiji Islands, Australia.

J. PEREIRA, Ry. Staff Quarters, M.S.M. Ry. Works, Hubli, Dist. Dharwar, India, Asia.

R. PHELPS, 1471 28th St., Ogden, Utah, has modern power of UP, D&RGW, modern employees' timetables of western roads, and old timetables of UP, sell or trade.

F. PRICE, R. 1, Oneonta, N. Y., has postcard views of stations, yards and roundhouses to exchange for other railroad views; also postcard of wrecks, trolley scenes and B.R.T. caboose.

E. ROUTH, Leopoldina Ry. Co., Ltd., Caixa Postal, 291, Rio de Janeiro, Brazil, South America.

H. RIGAR, 812 Main St., Elwood, Ind., has 2½ x 4¼ of PRR and NP, trade or sell.

E. RIOUX, 80 Farrington St., N. Quincy, Mass., has 25 New Haven rosters to sell or trade for prints or negatives, preferably NH.

R. ROEDEMA, 58 N. 14th St., Hawthorne, N. J., has about 5,000 postcard engine photos, 50 assorted for $1.10 postpaid. Also has railroad books; buys photos of wrecks and famous trains; send list or sample.

J. RONAN, 420 E. 72nd St., N. Y. C., wants clear builders' silhouette photos of B&O No. 5501, N&W 137, SP 4367, CRRofNJ 194, M-K-T 380.

H. ROSENKRANZ, 36 Warren St., Bloomfield, N. J., has clippings of English freight and passenger engines to trade for American steam locomotives, switch and freight, side view only; buys negatives at 5c each.

W. RUTH, 5430 Ferdinand St., Chicago, Ill., has 116 size of C&NW, CMStP&P, CB&Q, CRI&P, CGW and others to trade for C&NW, SP or other modern power; send list; also sells.

W. SANGSTER, 2855 Douglas Rd., New Westminster, B. C., Canada, has postcard of CPR mountain views; wants Feb., Apr., May, Nov., 1932, and Jan., Feb., Mar., 1933, "Railroad Stories"; also lists and sample print of modern power on other U. S. and Canadian lines.

L. SANSCARTIER, Mileage 105, Armstrong, Ontario, Canada, collects old-time and big modern motive power.

W. SCHIEBER, 184 24th St. S. E., Massillon, O., specializes in W&LE, but has others to trade for all roads in U. S.; also has No. 19 orders and Form A clearance cards of W&LE to trade; buys back issues of "Railroad Stories."

V. & J. SELIGER, 312 Leroy Ave., Cedarhurst, L. I., N. Y., are starting collections.

C. SHUTTLER, R. R. 1, Milan, O., wants photos suitable for framing of SP "West Coast Ltd.," IC "Panama Ltd.," NYC "20th Century"; also 2-8-8-2 type or Mallets of SP, WP, GN; railroad songs and old issues "Railroad Man's Magazine."

J. SMITH, Box 674, Limon, Colo., has 116 size photos of Rock Island, train orders of Rock Island and UP, trade for 116 photos of other roads and eastern timetables; also has stamps. Send your list.

H. STEINMEYER, 174 Nixon Ave., Tompkinsville, Staten Island, N. Y., wants B&O modern power, postcard size; has B&M, B&O, CV, CRRofNJ, PRR, LV, NYC, Reading, trade or sell; list for 3c stamp.

F. STINDT, 1517 Paru St., Alameda, Calif., has snaps of Nevada County Narrow Gage Nos. 1, 2, 5, 7, 9, at 7c each.

W. STOWMAN, 7444 Forrest Ave., E. Germantown, Phila., Pa., wants following Reading classes in 5 x 7 or builders' sizes: A-2a, A-4b, A-5a, B-4a, B-4b, B-5a, B-6a, B-7a, B-8a, B-9a, I-2e, I-2f, I-13, I-3a, I-4b, I-5a, I-5c, I-7a, I-7b, I-7i, I-7j, I-7k, I-7m, M-1sb, J-1sa, N-1sb, N-1sc, N-1sd, I-0sa, L-6sa, P-7sb, K-1sc, and D-8b. Buys or trades photos, Baldwin books, etc., for same.

C. SIEW, Goods Office, F.M.S. Rys., Kuala Sumpur, F.M.S., Malaya, Asia.

C. STEFANON, Manager, Ry. Hotel, Dodma, T.T., E. Africa.

RAILROAD STORIES Readers' Choice

280 Broadway, New York City

Stories, features and departments I like best in the November issue are:

1 DDW RS

2

3

4

5 S-L-F 20 T

My favorite railroad author is:

.....

Name.....

Occupation.....

Address.....

C. TRAUB, 1111 Madison Ave., Covington, Ky., has following issues of old "Railroad Man's Magazine" for best offer: Oct., 1906 (first issue); Apr., June, 1907; Jan., Aug., Dec., 1908; Aug., 1909; Jan., 1910; Feb., Sept., 1911; July, 1912; Mar., Nov., 1913; Mar., 1915; July, Sept., 1916. Has following magazines to trade for back numbers of "Railroad Stories," or to sell or trade for what have you: Cosmopolitan, May, 1896; McClure's, Feb., June, 1902; Scribner's, Apr., 1896; Pearson's, Dec., 1900; Booklover's, Apr., 1904; Everybody's, Mar., 1915.

D. THICKENS, R. F. D. Box 196, Walnut Creek, Calif., has postcards of Nevada County Narrow Gage Nos. 5, 7, 9 for sale; also 116 size and of freight and passenger equipment.

G. THOMAS 31st and West Ave., Ocean City, N. J., wants photos of Tenn. Central, NC&StL engines and trains; has photos or employees' magazines to trade.

R. THOMPSON, JR., Rainy River, Ontario, Canada, has 18 CNR locomotive postcards and 2 builders' photos for $1.

M. TOMME, Raymondville, Tex., sells 116, postcard and 5 x 7 sizes of large and small lines, old and new timers.

A. TURNER, S.S. Princess Norah, Pier D, CPR Docks, Vancouver, B. C., Canada.

B. WARD, 658 3rd Ave., San Francisco, Calif., wants rosters of old DSP&P and Nevada County Narrow Gage, also South and Central American locomotives, esp. narrow gage and Trans-Andine.

J. VILA, Maquinista, Ferroviario, Progreso 31, 2, Villaneuva y Geltru (Barcelona), Cataluna, Spain.

L. WENGRZYN, 29 Washington St., Ipswich, Mass., wants old train orders or flimsies.

G. WILBUR and V. CRANE, 39 12th St., New London, Conn., want photos of Groton & Stonington traction; New London & East Lyme; Shore Line; Montville St. Ry.; New London city lines; Norwich & Westerly; and old open cars of New London, Norwich & Willimatic trolley lines. Also old-time CV and New Haven wrecks, and No. 313 of CV.

F. WILLIAMS, 101 Paine Ave., Auburn, R. I., trades photos of all New England trolleys, and interurbans (only) outside New England; exchanges lists; has few steam snaps to trade for electric pictures, 116 size or smaller.

$200 My First Week

... Now in his OWN Business.

L. A. Eagles took in $200 his first week. Harry Hill says: "Paid for home with H-B Rug-Washer. Earned $86 first day." H. I. Riley averages about $35 a day. C. R. Bergseth writes, "My profits run about $400 every month." A. L. Miller says, "Have had H-B Rug-Washer 6 years—have earned as high as $92 a day." Many others make $125 to $200 per week. Thousands earning quick, easy profits. Electricity does the work. Finishes rugs like new, on customer's floor. Hundreds of customers in your vicinity and near-by towns. Write today for booklet.

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H. B. Company, 646-N, H. B. Bldg., Racine, Wis.

NOT HOUSE-BROKEN!

We call him Scotty. When your guests put cigarettes in the ash tray—and pat Scotty's head he'll raise his little hind leg and—**PUT OUT THE CIGARETTE.** Convenient water sack inside Scotty is easily filled. **At last a canine's most inconvenient habit has been turned into a practical and extremely funny use! Scotty mounted on ash tray—both in attractive bronze finish.** *Scotty may be had for $1.50 postpaid.*

Money back if not completely satisfied. Remit to **Only $1.50** each delivered

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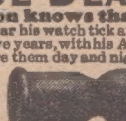

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